माध्यमिक स्तर पर हिंदी – शिक्षण हेतु अत्यावश्यक व्यक्तियों के लिए प्रशिक्षण पैकेज का विकास और परीक्षण

डॉ. अनूप कुमार

कार्यक्रम समन्वयक

सामाजिक और मानविकी शिक्षा विभाग

क्षेत्रीय शिक्षा संस्थान

राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्

भुवनेश्वर

१९९७-९८

प्राक्कथन

"माध्यमिक स्तर पर हिंदी-शिक्षण हेतु अत्यावश्यक व्यक्तियों के लिए प्रशिक्षण पैकेज का विकास और परीक्षण" संबंधी कार्यक्रम पी.एसी. कार्यक्रम (सं. १७.२३) के अंतर्गत, क्षेत्रीय शिक्षा संस्थान, भुवनेश्वर की ओर से आयोजित और संपन्न किया गया ।

माध्यमिक स्तर पर हिंदी-शिक्षण-संबंधी अनेक समस्याएं शिक्षक/शिक्षिकाओं और विद्यार्थियों के सामने आती रहती हैं । उन समस्याओं के कारणों की जानकारी करके उनके निराकरण के उपायों को सुझाने के उद्देश्य से, यह कार्यक्रम आयोजित किया गया । हिंदी प्रशिक्षण पैकेज निर्मित करने के क्रम में उड़ीसा और पश्चिम बंगाल प्रांत को विशेष रूप से ध्यान में रखा गया है । फिर भी यह पैकेज, हिंदी को किसी न किसी रूप में सीखने-सिखाने के कार्य में सहायक सिद्ध हो सकता है । उल्लेख्य है कि प्रशिक्षण पैकेज के लिए जो मॉड्यूल विकसित किये गए, उनकी व्यावहारिक उपयोगिता की परख के लिए उनका, उड़ीसा और पश्चिम बंगाल के विद्यालयों की कक्षाओं में परीक्षण भी किया गया एवं परीक्षण - परिणाम उत्साहवर्द्धक रहे ।

मुझे यह कहने में अत्यंत प्रसन्नता का अनुभव हो रहा है कि डॉ. अनूप कुमार ने, अन्य सहयोगियों के सहयोग से कार्यक्रम का जो प्रतिवेदन व्यापक विस्तार के लिए प्रस्तुत किया, उससे माध्यमिक स्तर पर हिंदी - शिक्षण की समस्याओं के निराकरण में सहायता मिल सकती है ।

२३ मार्च १९९८

डी.के. भट्टाचार्जी

(प्रो .डी.के. भट्टाचार्जी)
प्राचार्य

आभार

"माध्यमिक स्तर पर हिंदी-शिक्षण हेतु अत्यावश्यक व्यक्तियों के लिए प्रशिक्षण पैकेज का विकास और परीक्षण" संबंधी कार्यक्रम, क्षेत्रीय शिक्षा संस्थान, भुवनेश्वर की ओर से आयोजित तथा संपन्न किया गया । यह कार्य, पी.ए.सी.कार्यक्रम (सं.१७.२३) के अंतर्गत किया गया । संप्रति, हिंदी भाषा प्रायः पूरे देश में किसी न किसी रूप में सीखी - सिखायी जा रही है। मातृभाषा के रूप में तो इसका अध्ययन/अध्यापन हो ही रहा है, द्वितीय/तृतीय भाषा के रूप में हिंदी-शिक्षण-कार्य में हिंदी शिक्षक/शिक्षिका के समक्ष समय - समय पर कई कठिनाइयाँ उपस्थित हुआ करती हैं जिनके निराकरण का प्रयास करने के उद्देश्य से यह कार्यक्रम आरंभ किया गया ।

उल्लेख्य है कि हिंदी प्रशिक्षण पैकेज निर्मित करने के क्रम में उड़ीसा और पश्चिम बंगाल को विशेष रूप से ध्यान में रखा गया है, फिर भी यह पैकेज हिंदी को किसी भी रूप में सिखाने - सीखने के कार्य में उपयोगी हो सकता है । इस कारणवश इसकी उपयोगिता अहिंदी भाषी क्षेत्रों के साथ-साथ, हिंदी भाषी क्षेत्रों में हो रहे हिंदी-शिक्षण के संदर्भ में भी हो सकती है ।

इस कार्यक्रम के अंतर्गत, आयोजित की गयी कार्यशाला में उड़ीसा और पश्चिम बंगाल से आए प्रतिभागियों को प्रश्नावली दी गयी जिसे उन्होंने भरकर दिया । उनके विश्लेषण से हिंदी-शिक्षण की समस्याओं के क्षेत्र निर्धारित किए गए और उन क्षेत्रों के आधार पर मॉड्यूल विकसित किये गए ।

मॉड्यूल के आधार पर पढ़ाने से, हिंदी-शिक्षण-प्रक्रिया में आनेवाली समस्याएँ किस स्तर तक दूर होती हैं, यह जानने के लिए, प्रशिक्षण पैकेज के मॉड्यूलों का उड़ीसा और पश्चिम बंगाल के कुछ विद्यालयों में परीक्षण (ट्राई आउट) किया गया और परिणाम संतोषजनक तथा उत्साहवर्द्धक रहे ।

मैं सर्वप्रथम, अपने प्राचार्य महोदय प्रो.डी.के.भट्टाचार्जी का हृदय से आभार व्यक्त करता हूँ जिन्होंने इस कार्यक्रम को संपन्न करने की दिशा में यथावश्यक प्रशासनिक और शैक्षणिक सहयोग देते हुए मेरा उत्साहवर्द्धन किया । उनके विचारपूर्ण परामर्श से यह कार्यक्रम संपन्न हो सका ।

मैं संकाय-अध्यक्ष महोदय प्रो.के.दोरैस्वामीजी के प्रति कृतज्ञता प्रकट करता हूँ जिन्होंने अपेक्षित सहयोग देते हुए इस कार्यक्रम को पुरा करवाया ।

मैं विभागाध्यक्ष, डॉ. वी.के.सुनवानीजी के प्रति भी आभारी हूँ क्योंकि पूरे कार्यक्रम के विभिन्न क्रियाकलापों में वे सक्रिय रूप से बहुमूल्य योग देते रहे ।

बाह्य संसाधक व्यक्तियों में प्रो.बी.के.दास, श्री वी.वी.विद्यार्थी, डॉ.एस.एल.पुरोहित, डॉ.सुव्रत लाहिड़ी, डॉ.विमलेश्वर द्विवेदी, डॉ.एस.के.नायक ने, और आंतरिक संसाधक व्यक्तियों में डॉ.वी.के.सुनवानी, डॉ.एस.पी.आनंद, डॉ.एस.के.गोयल, डॉ.ए.डी.तिवारी, डॉ.के.सी.पंडा ने अपने अध्यापकीय अनुभवों से इस कार्यक्रम में आए प्रतिभागियों को विद्वतापूर्ण परामर्श दिये । मैं सबके प्रति आभार व्यक्त करता हूँ क्योंकि उनके सुयोग्य विचारों से कार्यक्रम को वैचारिक उत्तेजना मिली ।

मैं समस्त प्रतिभागियों को धन्यवाद देता हूँ । उन्होंने निष्ठापूर्वक, सुविचारित ढंग से मॉड्यूलों को तैयार करने में महत्त्वपूर्ण भूमिका निभायी ।

मैं उड़ीसा और पश्चिम बंगाल के उन विद्यालयों के प्रधानध्यापकों/प्रधानाध्यापिकाओं का आभारी हूँ जिन्होंने अपने विद्यालयों में परीक्षण-कार्य करने की अनुमति दी, साथ ही, उसे संपन्न भी करवाया । मैं उन शिक्षकों और पर्यवेक्षकों का विशेष रूप से आभारी हूँ जिन्होंने मॉड्यूलों के परीक्षण-कार्य को संपन्न करने में सक्रिय भूमिका निभायी ।

मैं संस्थान के विस्तार शिक्षा विभाग के अध्यक्ष डॉ.आर.एन.दीक्षित और उनके विभाग के समस्त सदस्यों को धन्यवाद देता हूँ जिन्होंने कार्यक्रम को संपन्न करवाने की दिशा में हर तरह का सहयोग दिया ।

अंत में, मैं अनुभव करता हूँ कि यह हिंदी प्रशिक्षण पैकेज, माध्यमिक स्तर पर किये जा रहे, हिंदी-शिक्षण-कार्य में आनेवाली विभिन्न कठिनाइयों के समाधान में अपना महत्त्वपूर्ण योग दे सकता है ।

२३ मार्च १९९८

अनूप कुमार

(डॉ. अनूप कुमार)
कार्यक्रम समन्वयक

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प्रस्तावना

पी॰एसी॰ कार्यक्रम सं॰ १७.२३ के अंतर्गत, "माध्यमिक स्तर पर हिंदी-शिक्षण हेतु अत्यावश्यक व्यक्तियों के लिए प्रशिक्षण पैकेज का विकास और परीक्षण" विषयक कार्यक्रम को संपन्न करने का दायित्व मुझे प्रदान किया गया। यह कार्य, हिंदी-शिक्षण के संदर्भ में आनेवाली अनेकानेक कठिनाइयों को देखते हुए, प्रासंगिक था। कारण यह कि आज देश में मातृभाषा/द्वितीय/तृतीय भाषा के रूप में हिंदी का अध्ययन-अध्यापन व्यापकता से हो रहा है। सीखने - सिखाने की इस प्रक्रिया में कई तरह की कठिनाइयाँ आती रहती हैं जिनका निराकरण करके ही अध्यापक/अध्यापिका, अपने शिक्षण-कार्य को निष्कर्ष तक पहुँचा सकता/सकती है। अहिंदी भाषी क्षेत्रों में, माध्यमिक स्तर पर हिंदी-शिक्षण में रत व्यक्तियों के सामने तो तरह-तरह कि समस्याएं आती ही रहती हैं, हिंदी भाषी क्षेत्रों में भी शिक्षण-कार्य में लगे लोगों को भी समय-समय पर कई कठिनाइयों से जूझना पड़ता है।

उल्लेख्य है कि प्रशिक्षण पैकेज को बनाने के क्रम में उड़ीसा और पश्चिम बंगाल के परिवेश को विशेष रूप से ध्यान में रखा गया। इसके अतिरिक्त उन प्रांतों में हिंदी-शिक्षण-क्रम में आने वाली कठिनाइयों को मालूम करके विभिन्न मॉड्यूल विकसित करने की जो योजना बनाई गयी, उसके पीछे दृष्टि यह रही कि वे मॉड्यूल अहिंदी भाषी क्षेत्रों के साथ-साथ हिंदी भाषी क्षेत्रों में भी हो रहे हिंदी भाषा के अध्ययन - अध्यापन के लिए उपयोगी सिद्ध हो सकें।

उद्देश्य

उपर्युक्त विवेचन के परिप्रेक्ष्य में, इस कार्यक्रम को संपन्न करने के क्रम में निम्नलिखित उद्देश्य निर्धारित किये गए —

- माध्यमिक स्तर पर हिंदी-शिक्षण की कठिनाइयों की जानकारी करना।
- उन कठिनाइयों के संभावित कारणों का पता लगाना।
- उन कारणों के निराकरण के लिए कार्य - प्रविधि सुझाते हुए, प्रशिक्षण पैकेज के लिए विभिन्न मॉड्यूल विकसित करना।
- प्रशिक्षण पैकेज के मॉड्यूल की व्यावहारिक उपयोगिता की परख के लिए कक्षा में उनका परीक्षण (ट्राइ आउट) करना।

- अत्यावश्यक व्यक्तियों की क्षमता को इस तरह बढ़ाना कि वे हिंदी-शिक्षण-संबंधी विभिन्न कठिनाइयों को कुशलतापूर्वक दूर कर सकें ।

उल्लेख्य है कि कार्यक्रम के आरंभ से यह बात ध्यान में रखी गयी कि प्रशिक्षण पैकेज के लिए सामग्री-निर्माण-क्रम में कार्य-प्रविधियों पर विशेष बल दिया जाए ताकि अध्यापन - कार्य जीवंत हो और उसमें लगे लोगों को, हिंदी सीख रहे विद्यार्थियों की भाषागत उलझनों को सुलझाने में सहायता मिले । इस संबंध में, इस बिंदु पर भी दृष्टि रखी गयी कि शिक्षण-कार्य में विद्यार्थियों को सक्रिय रखा जाए क्योंकि भाषा सिखाने का कार्य उन्हीं के लिए हो रहा है । इस तरह, हम कह सकते हैं कि इस कार्यक्रम की शुरूआत, इस संकल्प से हुई कि अंततः हिंदी शिक्षण-कार्य में लगे व्यक्ति इस तरह सक्षम हो जाएं कि वे, अपने विद्यार्थियों में भी भाषागत कठिनाइयों के निराकरण करने की क्षमता विकसित कर सकें ।

(अ) कार्यक्रम की आरंभिक बैठक

प्रशिक्षण पैकेज को बनाने के संदर्भ में, उसका स्वरूप-निर्धारण करने के लिए और हिंदी-शिक्षण से जुड़ी समस्याओं की पहचान करने के उद्देश्य से शिक्षक/शिक्षिका पर प्रयोग हेतु प्रश्नावली के निर्माण के लिए, क्षेत्रीय शिक्षा संस्थान, भुवनेश्वर में, दिनांक २८.५.९७ से ३०.५.९७ तक, तीन दिवसीय एक बैठक की गयी। इसमें निम्नलिखित सदस्य उपस्थित हुए —

१. प्रो. विक्रम कुमार दास (बाहय संसाधक व्यक्ति)
२. डॉ. विजय कुमार सुनवानी (आंतरिक संसाधक व्यक्ति)
३. डॉ. सत्यपाल आनंद (आंतरिक संसाधक व्यक्ति)
४. डॉ. सुशील कुमार गोयल (आंतरिक संसाधक व्यक्ति)
५. डॉ. अंबादत्त तिवारी (आंतरिक संसाधक व्यक्ति)
६. डॉ. अनूप कुमार. (आंतरिक संसाधक व्यक्ति)
७. डॉ. कीर्तिचंद्र पंडा (आंतरिक संसाधक व्यक्ति)

सर्वप्रथम सदस्यों ने प्रशिक्षण पैकेज के स्वरूप को लेकर गहन विचार-विमर्श किया और तदुपरांत इस निष्कर्ष पर आम सहमति हुई कि आगे चलकर क्षेत्र-निर्धारण होने पर जो मॉड्यूल लिखे जाएं, उनका प्रारूप निम्नलिखित बिंदुओं के अनुरूप हो —

१. प्रशिक्षण विषय-वस्तु
२. प्रशिक्षण के उद्देश्य
३. प्रतिभागियों के क्रियाकलाप
४. क्रियाकलापों को पूरा करने की कार्यप्रणाली
५. मूल्यांकन

इस बैठक में हिंदी-शिक्षण की विभिन्न समस्याओं को जानने के उद्देश्य से शिक्षक/शिक्षिका पर प्रयोग हेतु प्रश्नावली के निर्माण का कार्य भी किया गया। प्रस्तुत बैठक में इस बात पर बल दिया गया कि माध्यमिक स्तर पर हिंदीशिक्षण हेतु प्रशिक्षण पैकेज को

विकसित करने के लिए जो कार्यशाला आयोजित की जाए, उसमें उन्हीं प्रतिभागियों को आमंत्रित किया जाए जो विषय (हिंदी) का अच्छा ज्ञान रखते हों, और माध्यमिक स्तर पर जिन्हें अध्यापन करने का व्यावहारिक अनुभव हो । सदस्यों ने यह भी अनुभव किया कि भविष्य में आयोजित होनेवाली कार्यशाला में मॉड्यूल बनाते समय इस बात का विशेष ध्यान रखा जाए कि यथासंभव वे कार्यप्रविधियाँ सुझाई जाएं जिन्हें करवाने में व्यावहारिक स्तर पर कठिनाई न हो । उस कार्यशाला में प्रतिभागियों को दिशा-निर्देश मिल सके, इसके लिए इस बैठक में नमूने के रूप में एक मॉड्यूल विकसित किया गया ।

माध्यमिक स्तर पर हिंदी प्रशिक्षण पैकेज के विकास संबंधी कार्यशाला का आयोजन

माध्यमिक स्तर पर हिंदी-शिक्षण हेतु अत्यावश्यक व्यक्तियों के लिए प्रशिक्षण पैकेज के विकास हेतु पाँच-दिवसीय एक कार्यशाला (८.९.९७ से १२.९.९७ तक), क्षेत्रीय शिक्षा संस्थान, भुवनेश्वर में आयोजित हुई । निदेशक, माध्यमिक शिक्षा, उड़ीसा और निदेशक, माध्यमिक शिक्षा, पश्चिम बंगाल से निवेदन किया गया कि वे कार्यशाला में भाग लेने के लिए माध्यमिक स्तर के हिंदी के दस - दस अत्यावश्यक व्यक्तियों को इस कार्यशाला में भाग लेने के लिए प्रतिनियुक्त करने की कृपा करें । साथ ही, दोनों प्रांतों से वाहय संसाधक व्यक्तियों को भी आमंत्रित किया गया । अंततः कार्यशाला में भाग लेने के लिए, उड़ीसा प्रांत से पाँच प्रतिभागी, और पश्चिम बंगाल से नौ प्रतिभागी इस संस्थान में आए । इसके अतिरिक्त उड़ीसा से तीन वाहय संसाधक व्यक्ति और पश्चिम बंगाल से दो वाहय संसाधक व्यक्ति उपस्थित हुए ।

दिनांक ८.९.९७ को, समागत प्रतिभागियों और संसाधक व्यक्तियों का पंजीयन हुआ, तदुपरांत इस संस्थान के प्राचार्य प्रो.डी.के.भट्टाचार्जी ने कार्यशाला का उद्घाटन किया और उद्घाटन भाषण दिया । इसके अनंतर कार्यशाला की आगे की कार्यवाही शुरू की गयी ।

उड़ीसा और पश्चिम बंगाल के अतिरिक्त आंतरिक संसाधक व्यक्तियों ने अपने अध्यापकीय अनुभवों के परिप्रेक्ष्य में हिंदी भाषा - शिक्षण की समस्याओं की ओर संकेत करते हुए, प्रतिभागियों को संबोधित किया तथा उनसे संवाद भी किया ।

प्रथम दिवस के भोजनोपरांत के अपराह्न सत्र में वाहय और आंतरिक संसाधक व्यक्तियों एवं प्रतिभागी जनों के साथ पूर्वनिर्मित प्रशिक्षण पैकेज के प्रारूप पर विचार किया गया एवं उनका ध्यान निम्नलिखित बिंदुओं की ओर आकृष्ट किया गया —

- प्रशिक्षण पैकेज के लिए जो मॉड्यूल बनाए जाएं वे प्रारूप के अनुरूप हों, जिससे सभी मॉड्यूलों में प्रारूपगत एकरूपता हो ।
- मॉड्यूल व्यावहारिक भाषिक कठिनाइयों को लक्ष्य कर निर्मित किये जाएं ।
- वे सीखनेवालों को केंद्र में रखकर विकसित किये जाएं ।
- उनमें; समस्याओं के निराकरण हेतु क्रिया-प्रविधियों पर बल दिया जाए ।

उल्लेख्य है कि द्वितीय दिवस के पूर्वाह्न सत्र में हिंदी-शिक्षण संबंधी कठिनाइयों को जानने के लिए और समस्याओं के क्षेत्र - निर्धारण हेतु, प्रतिभागी शिक्षकों को पूर्वनिर्मित प्रश्नावली भरने के लिए दी गयी । प्रतिभागीजनों ने प्रश्नावली को भरकर वापस किया। उसके उपरांत बाहय एवं आंतरिक संसाधक व्यक्तियों ने सामूहिक रूप से प्रश्नावलियों का अध्ययन तथा विश्लेषण किया । प्रतिभागियों ने प्रश्नावली में हिंदी - शिक्षण क्रम में आने वाली जिन प्रमुख कठिनाइयों का उल्लेख किया था, उनको निम्नलिखित रूप में देखा जा सकता है—

१. उच्चारण-शिक्षण
२. वर्तनी-शिक्षण
३. अर्थबोध-शिक्षण
४. वाक्य-संरचना-शिक्षण
५. लिंग-शिक्षण
६. वचन-शिक्षण
७. क्रिया-रूप-शिक्षण
८. कारक-चिह्न-शिक्षण

इन समस्याओं पर मॉड्यूल बनाने के लिए समूह-कार्य हेतु,

प्रतिभागियों और संसाधक व्यक्तियों के चार समूह निर्मित किये गए । प्रत्येक समूह को दो समस्याओं पर मॉड्यूल बनाने का कार्य सौंपा गया । साथ ही, उन्हें पूर्व विकसित किये गए मॉड्यूल के नमूने को, दिशा-निर्देश करने हेतु दिया गया । समूह-कार्य के लिए सदस्यों का वर्गीकरण निम्नवत् किया गया —

<u>प्रथम समूह</u>

(प्रशिक्षण विषय-वस्तु - (१) उच्चारण-शिक्षण

(२) वर्तनी-शिक्षण)

<u>प्रतिभागीगण</u>

१. श्री मदन मोहन तिवारी (समूह-अधिनायक)

२. श्री हृदय नारायण त्रिपाठी

३. श्री संतोष कुमार मोहंती

<u>संसाधक व्यक्ति</u>

१. डॉ. सुव्रत लाहिड़ी

२. डॉ. अनूप कुमार

<u>द्वितीय समूह</u>

(प्रशिक्षण विषय-वस्तु -(क) अर्थबोध-शिक्षण

(ख) वाक्य-संरचना-शिक्षण)

<u>प्रतिभागीगण</u>

१. श्री शिवसहाय सिंह (समूह-अधिनायक)

२. श्री मन्नू प्रसाद साह

३. श्री विश्वनाथ सिंह

४. श्री मोहम्मद एरकान

संसाधक व्यक्ति

श्री विश्ववीर विद्यार्थी

तृतीय समूह

(प्रशिक्षण विषय-वस्तु - (क) लिंग - शिक्षण

(ख) वचन - शिक्षण)

प्रतिभागीगण

१. श्री रामजन्म सिंह यादव (समूह-अधिनायक)

२. श्री सुरेश पांडेय

३. श्री लक्ष्मीकांत नायक

४. श्री भुवनेश्वर राउत

संसाधक व्यक्ति

१. डॉ. शंकरलाल पुरोहित

२. डॉ. सुधांशु कुमार नायक

चतुर्थ समूह

(प्रशिक्षण विषय-वस्तु - (१) क्रिया-रूप-शिक्षण

(२) कारक-चिह्न-शिक्षण)

प्रतिभागीगण

१. श्री सुभाष कुमार पांडेय (समूह-अधिनायक)

२. श्री राधारमण सिंह

३. श्री निरंजन बारिक

संसाधक व्यक्ति

१. डॉ. विजय कुमार सुनवानी

२. श्री विमलेश्वर द्विवेदी

समूह-निर्मिति के बाद, समूह-कार्य आरंभ हुआ । प्रत्येक समूह ने, निर्धारित विषयों पर मॉड्यूल निर्मित करने का कार्यशुरू किया । समूह-सदस्यों के बीच, हिंदी-

शिक्षण-क्रम में आनेवाली निर्दिष्ट कठिनाइयों के कारणों और निराकरण के उपायों को लेकर गहन विचार-मंथन हुआ । इसके उपरांत सभी समूहों ने मॉड्यूल के नमूने के आधार पर निर्धारित क्षेत्रों पर, मॉड्यूल तैयार किये । पाँचवे दिन के आरंभिक सामान्य सत्र में, प्रत्येक समूह के समूह-अधिनायक ने अपने - अपने मॉड्यूल के साथ, समूह-प्रतिवेदन प्रस्तुत किया । समूह-कार्य पर, प्रतिभागियों और संसाधक व्यक्तियों ने विचार-विमर्श किया और आवश्यकतानुसार उसमें संशोधन करके, उसे व्यवस्थित किया गया ।

भोजनावकाश के उपरांत कार्यक्रम का समापन-समारोह आयोजित किया गया जिसकी अध्यक्षता, क्षेत्रीय शिक्षा संस्थान के प्राचार्य प्रो. डी. के. भट्टाचार्जी ने की । उन्होंने प्रतिभागियों को अपने कर-कमलों से, कार्यक्रम में भाग लेने संबंधी प्रमाणपत्र दिये और उन्हें संबोधित करते हुए कार्यशाला की कार्यप्रणली पर संतोष प्रकट किया ।

प्रतिभागियों में से श्री मदन मोहन तिवारी (पश्चिम बंगाल) और श्री लक्ष्मीकांत नायक (उड़ीसा) ने अपने उद्गार व्यक्त करते हुए कार्यशाला के उद्देश्य और उसकी कार्यप्रणाली की सराहना की । साथ ही, उन्होंने समस्त प्रतिभागियों की ओर से आभार-प्रदर्शन किया । संस्थान के तत्कालीन डीन प्रो. ए. एल. एन. शर्मा, सामाजिक और मानविकी शिक्षा विभाग के अध्यक्ष डॉ. वी. के. सुनवानी ने प्रतिभागियों को संबोधित करते हुए कार्यशाला की सफलता पर संतोष व्यक्त किया । अंत में, कार्यक्रम-समन्वयक डॉ. अनूप कुमार ने धन्यवाद ज्ञापन का कार्य किया ।

माध्यमिक स्तर पर हिंदी-शिक्षण हेतु बनाए गए प्रशिक्षण पैकेज के मॉड्यूलों के परीक्षण का कार्य दिनांक १७.१.९८ से २७.१.९८ के बीच उड़ीसा और पश्चिम बंगाल में किया गया । उड़ीसा में परीक्षण का कार्यक्रम चंद्रशेखर जीऊ बहुमुखी शिक्षा निकेतन, देवगाँ (ढेंकानाल) में, नवीं कक्षा में संपन्न हुआ, जबकि यही कार्यक्रम पश्चिम बंगाल में श्री बालकृष्ण विट्ठलनाथ विद्यालय, कलकत्ता और श्री विशुद्धानंद सरस्वती विद्यालय, कलकत्ता में, क्रमशः नवीं - दसवीं एवं नवीं कक्षा में किया गया । शिक्षकों ने प्रत्येक मॉड्यूल के आधार पर कक्षाएं लीं और पढ़ाने के क्रम में स्वयं का मूल्यांकन भी किया । पर्यवेक्षकों ने कक्षा में हुए शिक्षण-कार्य को मॉड्यूलों के परिप्रेक्ष्य में पर्यवेक्षित किया और निर्धारित तालिका भरी । उसके उपरांत, परीक्षण से प्राप्त परिणाम से अवगत कराने के लिए शिक्षक और पर्यवेक्षक द्वारा भरी गयी तालिकाएँ, कार्यक्रम - समन्वयक को भेज दी गयीं ।

परीक्षण के क्रम में निम्नलिखित साधन-सामग्री का व्यवहार किया गया—

१) शिक्षक/शिक्षिका - स्वयं मूल्यांकन तालिका :-

शिक्षकों ने प्रत्येक मॉड्यूल के आधार पर कक्षा में पढ़ाया और पढ़ाने के तत्काल बाद इस मूल्यांकन-तालिका को भरा ।

२) पर्यवेक्षण-तालिका :-

पर्यवेक्षकों ने कक्षा में किये गए शिक्षण-कार्य को पर्यवेक्षित किया और उसी समय पर्यवेक्षण-तालिका भरी ।

परीक्षण से प्राप्त परिणाम

परीक्षण से जो परिणाम सामने आए, उन्हें निम्नलिखित रूप में देखा जा सकता है —

१) मॉड्यूल के अनुसार पढ़ाने से हिंदी - शिक्षण संबंधी कठिनाइयों को दूर करने में अपेक्षाकृत काफी सहायता मिली ।

२) मॉड्यूल की भाषा विद्यार्थियों के लिए बोधगम्य थी ।

३) मॉड्यूल विधिवत् बनाए गए हैं ।

४) मॉड्यूल के विषय को पढ़ाने के पहले शिक्षक/शिक्षिका को अभ्यास करना होगा ।

विभिन्न मॉड्यूलों के परीक्षण के उपरांत, प्रशिक्षण पैकेज को अंतिम रूप दिया गया । ऐसी अपेक्षा की जा सकती है कि माध्यमिक स्तर पर हिंदी - शिक्षण की समस्याओं को अपेक्षाकृत दूर करने की दिशा में यह पैकेज सार्थक योग दे सकता है । इस सामग्री की सफलता काफ़ी-कुछ शिक्षक/शिक्षिकाओं पर निर्भर करती है, क्योंकि वे जितनी रुचि और विवेक से सामग्री को विद्यार्थियों तक संप्रेषित करेंगे/करेंगी, विषयगत समस्या का उतना ही समाधान होता जाएगा । उल्लेख्य है कि शिक्षक/शिक्षिका, परिवेश की आवश्यकता के अनुरूप, यदि समस्या के निराकरण के कोई अन्य सार्थक उपाय उपयोग में लाते/लाती हैं, तो उसका स्वागत किया जाना चाहिए । शायद यही वांछनीय भी है कि शिक्षक/शिक्षिका और विद्यार्थी, इस सीमा तक सक्षम हो जाएं कि उनमें समस्या को सुलझाने की क्षमता विकसित हो जाए । इस प्रशिक्षण पैकेज के विषय में इतना ही कहना है ।

प्रशिक्षण पैकेज की सामग्री आपके सामने प्रस्तुत है । आशा है, आप अधिकाधिक इसका उपयोग हिंदी - शिक्षण के संदर्भ में करेंगे तथा अपनी प्रतिक्रियाओं से अवगत कराएंगे । उस परिप्रेक्ष्य में प्रशिक्षण पैकेज के स्वरूप को और भी समृद्ध किया जा सकेगा ।

अनूप कुमार

कार्यक्रम समन्वयक

क. उन्हें स्वेच्छा से किसी परिचित और आत्मीय विषय पर बोलने के लिए प्रेरित करना ।

ख. उन्हें निर्धारित किसी विषय पर अपने विचार व्यक्त करने के लिए उत्साहित करना ।

ग. उन्हें विभिन्न समूहों में बाँटकर किसी विषय पर परस्पर विचार-विमर्श और संवाद करने का अवसर देना ।

घ. उनसे दैनिक जीवन से जुड़े प्रश्न पूछते हुए, उनके उत्तर को ध्यान से सुनना ।

इस तरह के क्रियाकलापों को करवाते हुए, प्रतिभागियों के उच्चारण-पक्ष को अधिकाधिक सुनने का अवसर मिलेगा । इस प्रक्रिया में जो अशुद्धियाँ होंगी, उनका विश्लेषण करने पर, निम्नलिखित संभावित कारण प्रकाश में आ सकते हैं—

मातृभाषा का प्रभाव - दोषपूर्ण उच्चारण का एक महत्त्वपूर्ण कारण है— मातृभाषा के प्रभाव का व्याघात । मातृभाषा की कोई विशेष प्रवृत्ति, हिंदी सीखने वाले के हिंदी-उच्चारण को प्रभावित कर सकती है । उदाहरण के लिए, बाँगला में श, ष और स के स्थान पर तालव्य "श" का प्रयोग अधिकांशतः हुआ करता है, यद्यपि लिखित रूप में ये तीनों रूप प्रचलित हैं । इस कारण हिंदी बोलते समय बाँगलाभाषियों से प्रायः दन्त्य "स" के स्थान पर तालव्य "श" का प्रयोग हो जाता है । उदाहरणार्थ, रसगुल्ला को रशोगुल्ला उच्चरित करना । इसके विपरीत उड़िया में "श", "ष" और "स" के लिए दन्त्य "स" का व्यवहार होता है जिसके कारण हिंदी के तालव्य "श" के स्थान पर उड़ियाभाषी दन्त्य "स" का ही उच्चारण करते हैं । जैसे, "भुवनेश्वर" के स्थान पर "भुबनेस्वर" का प्रयोग किया जाना । इसी तरह स्वर के ह्रस्व एवं दीर्घ उच्चारण में प्रायः कठिनाई होती है और दीर्घ के ह्रस्वीकरण की प्रवृत्ति बाँगला एवं उड़िया में पायी जाती है । उदाहरणार्थ "दीनबन्धु" शब्द को लिया जा सकता है । इस शब्द का उच्चारण बाँगला और उड़िया में "दिनबन्धु" के रूप में होता है ।

दोनों भाषाओं (बाँगला और उड़िया) में, हिंदी के दीर्घ "ऊ" का उच्चारण ह्रस्व "उ" के रूप में होता है । जैसे :- फूल — फुल

कूल — कुल

उड़िया में कभी-कभी, अल्पप्राण ध्वनि, महाप्राण में परिवर्तित हो जाती है।

यथा —

स्तान — स्थान ("त" के स्थान पर "थ")

इसी कारणवश "हिंदुस्तान" को "हिंदुस्थान" जैसा उच्चरित किया जाता है । उल्लेख्य है कि भाषायी संस्कार के कारण उपर्युक्त दोनों भाषाओं (बॉं. और उ.) में जगह के लिए स्थान शब्द का प्रयोग होता है । वस्तुतः "स्तान" और "स्थान" में अर्थ-भेद नहीं है, उच्चारणगत अंतर विद्यमान है ।

ऐसा भी देखने को मिलता है कि बाँगला तथा उड़िया, दोनों भाषाओं के लोग जब हिंदी का व्यवहार करते हैं, तो हिंदी के कुछ शब्दों में प्रयुक्त महाप्राण ध्वनि, अल्पप्राण में बदल जाती है जिससे उच्चारणगत परिवर्तन आ जाता है ।

जैसे —

हाथ — हात

इसी तरह हिंदी का "व", "ब" रूप में उचचरित होता है । यथा, "भुवनेश्वर" के स्थान पर "भुबनेस्वर" उच्चरित करना । बाँगला एवं उड़िया, दोनों भाषाओं में हिंदी का "य", "ज" रूप में उच्चरित किया जाता है, जैसे "युवती" के स्थान पर "जुबती" उच्चरित करना । द्रष्टव्य है कि लिखित रूप में इन दोनों ध्वनियों ("व" और "य") का व्यवहार उनमें होता है । हिंदी की संयुक्त व्यंजन ध्वनियों के प्रसंग में, बाँगला में प्रायः किसी एक ध्वनि का द्वित्वीकरण हो जाता है । यथा —

सत्य — सत्तो

स्वार्थ — सार्थ

बाँगला भाषा में "पढ़ने" के लिए "पड़" शब्द का प्रयोग होता है । अतः वहाँ "ढ़" और "ड़" के उच्चारण में भ्रांति हो जाती है । इसी प्रकार "र" और "ड़" में भी उच्चारणगत भ्रम उत्पन्न होता है । यथा "राम" को "ड़ाम" कहते हैं । "राजा" को "ड़ाजा" । अतएव उनके पार्थक्य को बताना आवश्यक है ।

जानकारी के अभाव के कारण

कभी-कभी जानकारी के अभाव से उच्चारण में विकार आ जाता है । जैसे, यदि किसी प्रतिभागी को ढ/ढ़ और ड/ड़ का फर्क नहीं मालूम है, तो वह "पढ़ाई" को "पढाई" और "झंडा" को "झंड़ा" रूप में उच्चरित कर सकता है ।

विदेशी ध्वनियों का प्रभाव.

भाषा का व्यवहार करनेवाला यदि सवाधान नहीं हैं, तो वह विदेशी भाषा की ध्वनियों के अनुरूप हिंदी बोलते समय उच्चारणगत अशुद्धि कर सकता है । उदाहरणार्थ — अँग्रेज़ी में KALINGA या ASHOKA के प्रभाव से प्राय: विद्यार्थी हिंदी में "कलिंगा" और "अशोका" उच्चरित कर देते हैं । इस तरह "फल" को "फ़ल" जैसा भी कह दिया जाता है । विदेशी भाषाओं के कुछ शब्दों के उच्चारण, हिंदी, बाँगला और उड़िया में भिन्न हो सकते हैं । इस अंतर का कारण क्षेत्रीय ध्वनिगत विशेषताएं हैं । एक ही शब्द के भिन्न उच्चारणों से भ्रम उत्पन्न हो सकता है । जैसे - फ़ारसी शब्द "वकालत" और "आहिस्ता" को देखा जा सकता है—

वकालत(हिंदी में), ओकालाति(बाँगला में), ओकिलाति(उड़िया में) ।

आहिस्ता(हिंदी में), आस्ते (बाँगला और उड़िया में) ।

हिंदी में अरबी-फ़ारसी की कुछ ध्वनियाँ, उच्चारणक्रम में प्राय: अपने मौलिक रूप में ही उच्चरित होती हैं । यथा — क़, ग़, फ़, ज़ । उच्चारण-पार्थक्य और अर्थ-भेद के लिए अरबी-फ़ारसी ध्वनियों में नुक्ते (.) का प्रयोग होता है । इससे उच्चारण-स्थान और प्रयत्न में परिवर्तन आता है, जबकि बाँगला और उड़िया में नुक्ते के अप्रचलन के कारण क और क़, ग और ग़ एवं ज और ज़, फ और फ़ में उच्चारण-संबंधी कोई अंतर नहीं रह जाता । ऐसी स्थिति में, हिंदी में विदेशी ध्वनियों वाले शब्दों का प्रयोग करते समय बाँगला और उड़िया भाषी, उन्हें बिना नुक्ते के प्रयुक्त कर सकते हैं । जैसे—

फ़न — फन

ज़रा — जरा

ज़न — जन

ज़माना — जमाना

ऐसी स्थिति में अर्थ-भ्रम की स्थिति आ सकती है क्योंकि फ़न का अर्थ "कला" है, जबकि "फन" साँप के शिरोभाग को कहते हैं । "ज़रा" "थोड़े" के अर्थ में आता है, और "जरा" बुढ़ापे के लिए व्यवहृत होता है । "ज़न" स्त्री का अर्थ देता है, तथा "जन" लोग के लिए प्रयुक्त होता है । इसी तरह "ज़माना" समय या काल को कहते हैं और "जमाना" क्रिया विशेष का अर्थ देता है (जैसे - दही जमाना, प्रभाव जमाना) । इसी तरह अँग्रेज़ी के कुछ शब्दों का उच्चारण हिंदी में जिस तरह से होता है, बाँगला और उड़िया में उस तरह नहीं होता यथा, - स्कूल (हिं) —इस्कूल (बाँगला और उड़िया), टमाटर (हिं) —— टेमाटो (बाँगला और उड़िया) ।

<u>अतिशीघ्रता/मुख-सुख के कारण:</u>

अतिशीघ्रता/मुख-सुख के कारण भी उच्चारण प्रभावित हो जाता है । जैसे - "डॉक्टर साहब" के स्थान पर "डाकसाब", "प्रणाम" के स्थान पर "परनाम", "जनता" के स्थान पर "जन्ता" का उच्चारण करना । "मास्टरसाहब" के लिए "मास्टसाब" या "माहटरसाव", "रिक्शा" के लिए "रिश्का" या "रिस्का" और "टैक्सीवाला" के लिए "टैस्कीवाला" का उच्चारण कर दिया जाता है ।

<u>मानसिक तनाव/दबाब अथवा भावावेश के कारण:</u>

मानसिक तनाव/दबाव अथवा भावावेश की दशा में उच्चारण के दोषपूर्ण हो जाने की आशंका हो जाती है, जैसे—

अभी निकलो	—	अब्भी निकलो
तब भी	—	तब्भी
जब भी	—	जब्भी

भावावेश के कारण बेटी को बिटिया, दुलारी को दुल्लो कह दिया जाता है ।

<u>शारीरिक विकार के कारण:</u>

ओष्ठ-विकृति, दंतक्षय, या दांतों की अस्वाभाविक स्थिति की वजह से भी सहज उच्चारण नहीं हो पाता । सुनने की क्षमता में कमी होने से भी उच्चारण प्रभावित हो सकता है क्योंकि दोषपूर्ण सुनना, अनुकरण को अपूर्ण बनाता है और परिणामस्वरूप दोषपूर्ण उच्चारण की स्थिति आती है ।

४. क्रियाकलापें को पूरा करने की कार्यप्रणाली:-

प्रतिभागियों के क्रियाकलापों को करवाने के क्रम में जो जानकारियाँ हुई, उनके परिप्रेक्ष्य में कार्यप्रणाली व्यवहृत करने पर क्रियाकलाप सार्थक निष्कर्ष तक पहुँच सकते हैं। कहने का तात्पर्य है कि उच्चारणगत अशुद्धियें और उनके कारणों की जानकारी प्राप्त करने के बाद अपेक्षित है कि उनको दूर करने के उपाय भी किए जाएं । यहाँ क्रमश: ऐसे सुझावों का उल्लेख किया जा रहा है —

मातृभाषा के प्रभाव से प्रभावित हिंदी के दोषपूर्ण उच्चारण को ठीक करने के लिए हिंदीभाषा के अध्यापक/अध्यापिका को प्रतिभागियें की मातृभाषा की जानकारी ही नहीं, उनका ज्ञान भी होना चाहिए । उसे ध्वनि विज्ञान की अवगति होनी चाहिए । इस संदर्भ में हिंदी के ध्वनि विज्ञान और प्रतिभागी की मातृभाषा के ध्वनि विज्ञान, दोनों का समानान्तर ज्ञान होना चाहिए । ऐसी स्थिति में ही वह सीखनेवालों को इस बात के लिए विवेकवान बना सकता/सकती है कि वे मातृभाषा और हिंदी के उच्चारण में, आवश्यकता होने पर, भेद कर सकें ।

स्वर के ह्रस्व एवं दीर्घ उच्चारण से संबद्ध शब्दों की आवृत्ति प्रतिभागी से कराने पर इस प्रकार की कठिनाई का निराकरण किया जा सकता है । उदाहरण के लिए "दिनबन्धु" एवं "दीनबन्धु" शब्दें को लिया जा सकता है । इसी तरह, कुछ अन्य शब्दें की आवृत्ति करवाते हुए, उनके अर्थ-भेद द्वारा, ह्रस्व और दीर्घमात्रा वाले शब्दों का अभ्यास कराया जा सकता है । जैसे —

खिल (एक क्रिया) — खील (एक खाद्य पदार्थ)

(अध्यापक/अध्यापिका इस तरह के अन्य शब्दों की सूची बनवाकर विद्यार्थियों से अभ्यास करवाएं।)

इसी प्रकार अल्पप्राण और महाप्राण ध्वनियों में उच्चारणगत अंतर होता है— जैसे- अल्पप्राण ध्वनि के उच्चारण में प्राणवायु कम निकलती है और महाप्राण के उच्चारण में यह अधिक निकलती है । अतः उच्चारण में पूर्णता लाने के लिए प्रतिभागियों से कठिनाई उत्पन्न करने वाली अल्पप्राण एवं महाप्राण ध्वनियों के उच्चारण का अभ्यास कराया जा सकता है ।

संधि एवं संधि-विच्छेद के माध्यम से भी शब्दों के उच्चारणगत विचलन को ठीक किया जा सकता है । जैसे—

भुवनेश्वर —— भुवनेस्वर

भुवन + ईश्वर = भुवनेश्वर, न कि भुवनेस्वर ।

(इस संदर्भ में प्रतिभागी को मूल शब्द की जानकारी करा देनी चाहिए ।)

इसी प्रकार "व"/"ब" के अंतर को स्पष्ट करने के लिए प्रतिभागियों से "व" एवं "ब" से संबद्ध शब्दों को परिचित कराया जाय । उदाहरणार्थ —

वह/बल, वन/बन

"य"/"ज" के अंतर को स्पष्ट करने के लिए "य" से संबद्ध शब्दों से उन्हें परिचित कराया जाए जैसे - युवती, युवक, नयन, चाय । यदि सीखनेवाले को अँग्रेज़ी का ज्ञान है तो अँग्रेज़ी में (YA = य) लिखकर भी समझाने का प्रयास किया जा सकता है।

शिक्षक/शिक्षिका द्वारा आदर्श उच्चारणं बताने के बाद संयुक्त वर्णों का बारंबार उच्चारण करवाने से विद्यार्थियों का उच्चारण ठीक किया जा सकता है। जैसे— रक्षा, भक्त, भक्ति, शक्ति ।(शिक्षक/शिक्षिका इन शब्दों का बारंबार अभ्यास करवाएंगे/करवाएंगी ।)

नुक्तेवाली (.) ध्वनियों के उच्चारण के लिए ध्वनि-विज्ञान का सहारा लिया जा सकता है । स्थान-प्रयत्न की शिक्षा देकर नुक़्ते से युक्त ध्वनि उच्चरित करवायीं जा सकती है । उदाहरण के लिए "ज़" ध्वनि के बारे में बताया जा सकता है कि जिह्वा की नोक को वर्त्स्य (ऊपर के सामने के दाँत के पीछे का मसूढ़ा) से स्पर्श कराके "ज़" ध्वनि निकलती है । अँग्रेजी वर्णों की सहायता भी आवश्यकतानुसार ली जा सकती है । जैसे "ज़" के लिए "Z" (ज़ेड)। ज़मीन (ZAMEEN) ।

जहाँ मिलती-जुलती ध्वनियों को लेकर भ्रम हो सकता है और उस कारणवश

उच्चारण प्रभावित हो सकता है, तो वहाँ अपेक्षित है कि अध्यापक/अध्यापिका स्वयं उन ध्वनियों का अलग-अलग उच्चारण करके अंतर बतायें । साथ ही, प्रतिभागियों को उन ध्वनियों के स्थान-प्रयत्न की भी सहज भाषा में जानकारी दी जाए ।

विदेशी ध्वनियों के प्रभाव से हुए उच्चारण-संबंधी दोषों को दूर करने के लिए अध्यापक/अध्यापिका अँग्रेज़ी और हिंदी वर्णमाला के प्रकृतिगत भेद को स्पष्ट कर सकते/सकतीं हैं । जैसे - अँग्रेज़ी में "GA" के रूप में "G" के साथ "A" अलग जुड़ा रहता है जबकि हिंदी में "ग" में "अ" अंतर्भुक्त होता है (ग्+अ) । इस विवेक से "कलिंग" और "अशोक" के उच्चारण में होने वाले दोष दूर किये जा सकते हैं ।

"फल" के स्थान पर "फ़ल" उच्चरित किए जाने की स्थिति में प्रतिभागियों को बताना होगा कि दोनों ओष्ठों को मिलाने से "फ" ध्वनि निकलेगी जो "ल" के साथ जुड़कर "फल" के रूप में उच्चरित होगी ।

अतिशीघ्रता की प्रवृत्ति को दूर करने के लिए प्रतिभागियों के स्वभाव का अध्ययन करना अपेक्षित है । यदि यह प्रवृत्ति तात्कालिक है, तो विशेष चिंता करने की आवश्यकता नहीं है । इसके विपरीत, अगर बोलने वाले की प्रवृत्ति में अतिशीघ्रता मौजूद है, तो उसे मनोवैज्ञानिक ढंग से सामान्य किया जा सकता है और इसके लिए मनोचिकित्सक से परामर्श लेना उपयोगी होगा । अध्यापक/अध्यापिका, विद्यार्थियों को धैर्यपूर्वक एवं सहज ढंग से बोलने का अभ्यास करवाएं । मुख-सुख के कारण उच्चारणगत जो विकार हों, उन्हें अध्यापक/अध्यापिका, प्रतिभागियों से बारंबार शुद्ध उच्चारण करवाते हुए सुधार सकते/सकती हैं ।

उल्लेख्य है कि उच्चारण शुद्ध करवाने के संदर्भ में अध्यापक/अध्यापिका कक्षा के विद्यार्थियों को समूह में भी बाँट सकते हैं । उदाहरणार्थ, कक्षा के विद्यार्थियों को चार समूहों में बाँट दिया जाए और प्रत्येक समूह को भ्रम उत्पन करनेवाली दो-दो ध्वनियाँ देकर उनका उच्चारण बताकर, आवृत्त करने के लिए कहा जा सकता है । फिर उन ध्वनियों से बने शब्दों को आवृत्त करने के लिए कहा जा सकता है ।

मानसिक तनाव/दबाव/भावावेश के कारण यदि उच्चारण प्रभावित हो रहा हो, तो *शिक्षक/शिक्षिका को, प्रतिभागी के माता-पिता/अभिभावकों से संपर्क करके तनाव/दबाव/*

भावावेश के कारणों को मालूम करके, उन्हें दूर करने का यत्न करना चाहिए । इस दिशा में, आवश्यकता पड़ने पर मनोचिकित्सक की सेवाएं ली जा सकती हैं ।

शारीरिक विकार के कारण हो रहे दोषपूर्ण उच्चारण के संदर्भ में भी भाषा-चिकित्सकों से परामर्श करके यथासंभव उन विकारों को दूर करने का प्रयास किया जा सकता है ।

५. **मूल्यांकन**:— अंतिम बिंदु मूल्यांकन का है । मूल्यांकन का महत्त्व तथा उपयोगिता इस बात में निहित है कि इसके आधार पर इस बात की जाँच कर सकते हैं कि आरंभ में जो उद्देश्य निर्धारित किए गए थे, उनकी प्राप्ति किस रूप में हुई । इस तरह मूल्यांकन - कार्य प्रशिक्षण के उद्देश्य, प्रतिभागियों के क्रियाकलाप, क्रियाकलापों को पूरा करने की कार्यप्रणाली से संबद्ध होना चाहिए ।

मूल्यांकन के चरण में, प्रतिभागियों द्वारा पूर्व किये गए क्रियाकलाप दुहराये जाने चाहिए और उन क्रियाकलापों के आधार पर ऐसे प्रश्न पूछे जाने चाहिए जिनसे मालूम हो सके कि वे अशुद्धियाँ किस सीमा तक दूर हुईं । उदाहरणार्थ, जिन बिंदुओं पर कठिनाइयों के निराकरण का यत्न किया गया है, उनसे संबंधित प्रश्न पूछे जाएं । जैसे "य" और "ज" से निर्मित शब्दों को देकर उनके सही उच्चारण की पहचान की सकती है—

यति, यान, जान, जहाज, याद, जग ।

यदि कहीं कुछ दोष रह जाते हैं, तो अध्यापक/अध्यापिका को पूर्व कराये गये क्रियाकलापों का और अधिक अभ्यास करवाना होगा और आवश्यकतानुसार वह नयी कार्यप्रणाली भी उसमें जोड़ सकता है ।

क्षेत्रीय शिक्षा संस्थान, भुवनेश्वर

हिंदी प्रशिक्षण पैकेज

१. प्रशिक्षण विषय-वस्तु : वर्तनी-शिक्षण :—

वाचन-प्रक्रिया की पूर्णता के लिए जिस प्रकार उच्चारण, आधार का कार्य करता है, उसी प्रकार वर्तनी का ठीक प्रयोग लेखन-सौकर्य के लिए मूल आधार का कार्य करता है। वर्तनी का संबंध लेखन से है और शुद्ध उच्चारण से लेखन और वर्तनी को सही दिशा मिलती है । भाषा में विशिष्ट क्रम के अक्षर-समूह को वर्तनी कहा जा सकता है। वर्तनी के समुचित ज्ञान के अभाव में भाषा सीखने का कार्य अधूरा रहता है । इस प्रकार हिंदी-शिक्षण-क्रम में वर्तनी-शिक्षण की महती आवश्यकता है ।

२. प्रशिक्षण के उद्देश्य :—

हिंदी वर्तनी-शिक्षण के संदर्भ में निम्नलिखित उद्देश्य निर्धारित किये जा सकते हैं—

क. वर्तनी की अशुद्धियों के कारणों की जानकारी करना ।

ख. उन कारणों का निराकरण करना ।

ग. वर्तनी-बोध का निर्माण करना ।

३. प्रतिभागियों के क्रियाकलाप :—

उपर्युक्त उद्देश्यों की प्राप्ति के लिए प्रतिभागियों से विभिन्न क्रियाकलाप कराए जा सकते हैं । उदाहरणार्थ——

क. उन्हें स्वेच्छा से किसी विषय पर अपने विचार लिखित रूप में अभिव्यक्त करने के लिए प्रेरित करना ।

ख. उन्हें, निर्धारित किसी विषय पर लिखने के लिए कहना ।

ग. उनसे श्रुतिलेख करवाना ।

इस प्रकार के क्रियाकलापों को करवाने के क्रम में, प्रतिभागियों की वर्तनीगत अशुद्धियों के विषय में जानकारी प्राप्त होगी । उन अशुद्धियों का विश्लेषण करने पर निम्नलिखित कारण सामने आ सकते हैं —

मातृभाषा का प्रभाव

प्रतिभागियों के निजी भाषिक संस्कार, हिंदी वर्तनी सीखने की प्रक्रिया में बाधा

उत्पन्न कर सकते हैं ।

उदाहरणार्थ, बाँगला तथा उड़िया, दोनों भाषाओं में संयुक्ताक्षरों के उच्चारण प्रायः हिंदी से भिन्न रूप में देखने को मिलते हैं । इसका असर हिंदी वर्तनी-लेखन पर भी पड़ता है। जैसे—

स्मृति (हिं) - सृति (बाँ) स्मति (उ) ।

स्वीकार — शिकार (बाँ), स्युकार (उ)।

वर्ण-भेद न कर सकने के कारण·

कभी-कभी वर्ण-भेद का विवेक न होने की वजह से भी वर्तनी में विकार आ जाता है । जैसे—

यदि किसी विद्यार्थी को ढ/ढ़ और ड/ड़ में भेद की जानकारी नहीं है, तो वह "पढ़ाई" को "पढाई" और "झंडा" को "झंड़ा" रूप में लिख सकता है ।

हिंदी में विदेशी भाषाओं (अरबी-फ़ारसी और अँग्रेजी आदि) के ढेर सारे शब्द प्रचलित हैं । बाँगला या उड़िया में प्रायः ऐसे शब्द इन भाषाओं की प्रकृति के अनुरूप भिन्न वर्तनी में प्रयुक्त होते हैं ।उन शब्दों की सही वर्तनी से अवगत न होने के कारण हिंदी में लिखते समय प्रतिभागी प्रायः अपनी भाषा के वर्तनी-रूप का प्रयोग कर देते हैं । जैसे—

कामयाब — कामियाब (बाँगला)

वकालत — ओकालति (बाँ), ओकिलाति (उ)

वकील —— उकिल (बाँ), ओकिल (उ)

आहिस्ता —— आस्ते (बाँ) एवं (उ)

ईमान —— इमान (बाँ)

आसमान —— आशमान (बाँ)

स्कूल —— (इ) स्कुल (बाँ) एवं (उ)

ग्लास —— गेलास (बाँ), गिलास (उ)

तत्सम शब्दों की सही जानकारी न होने के कारण

तत्सम शब्दों की वर्तनी की सही जानकारी न होने के कारण या कहीं-कहीं उच्चारण-विकार से वर्तनी-विकार अनायास हो जाते हैं । जैसे—

चिह्न —— चिन्ह.

आह्वान —आवहान

इसी प्रकार द्वन्द्व — द्वन्द और स्वास्थ्य —स्वास्थ आदि ।

प्रत्यय-प्रयोग के नियम से अवगत न होने के कारण

प्रत्ययों की शब्द-निर्माण में महत्त्वपूर्ण भूमिका रहती है । प्रत्ययों के जुड़ने से मूल शब्द का रूप कभी अपरिवर्तित रहता है, तो कभी उनमें परिवर्तन आ जाता है । हिंदी सीखनेवाले उस स्थिति में अशुद्धि कर सकते हैं जबकि प्रत्यय जुड़ने से मूल शब्द में कुछ बदलाव आ जाता है । जैसे—

विज्ञान + इक — "वैज्ञानिक" होता है लेकिन उस "विज्ञानिक" लिख दिया जाता है ।

संधि के नियमों की जानकारी न होने के कारण

संधि के नियमों की जानकारी न होने के कारण भी वर्तनी की अशुद्धियाँ हो जाती हैं । जैसे —

"उज्ज्वल" के स्थान पर "उज्ज्वल" या "उज्वल" लिख देना ।

मात्रा के अशुद्ध प्रयोग के कारण

विशेषतः "रेफ" के प्रयोग का समुचित ज्ञान न होने के कारण अथवा उच्चारण-विकार से वर्तनी में अशुद्धियों की प्रवृत्ति बढ़ जाती है । जैसे—

ईर्ष्या —— ईष्र्या

मर्मर —— ममर्र

निर्झर—— निझर्र

झरना —— झर्ना

हरदम —— हर्दम

उल्लेख्य है कि करन (करण) प्रत्यय के योग से मात्रा-परिवर्तन हो सकता है। शब्दों में "करन" जुड़ने पर ह्रस्व इकार का परिवर्तन, दीर्घ ई में हो जाता है । जैसे—

शुद्धि + करण — शुद्धीकरण

प्रस्तुति + करण — प्रस्तुतीकरण.

ये ऐसे ही शब्द हैं जो 'करण' युक्त होने पर दीर्घमात्रा ग्रहण कर लेते हैं, लेकिन प्रत्यय-प्रयोग-संबंधी नियम की जानकारी न होने के कारण "शुद्धिकरण" और "प्रस्तुतिकरण"

जैसा दोषपूर्ण प्रयोग कर दिया जाता है । उपसर्गों के प्रयोग में भी अशुद्धियाँ हो सकती हैं।

उच्चारण-विकार के कारण

उच्चारण-विकार से लेखन-प्रक्रिया प्रभावित होती है । परिणामस्वरूप वर्तनी में विकार आ जाना स्वाभाविक हो जाता है और विशेषतः तत्सम शब्दों के उच्चारण में प्रतिभागियों में मातृभाषा का उच्चारण-संस्कार हावी रहता है । फलस्वरूप वर्तनी में अशुद्धियाँ होती हैं । उदाहरण के लिए —

उड़िया में "ऋ" का "रु" के रूप में उच्चारण होता है । जैसे —

ऋषि(हिं)— रुषि (उ)

अमृत(हिं)— अम्रुत (उ)

मृत्यु(हिं)— म्रुत्यु (उ)

तृष्णा(हिं)— त्रुष्णा (उ),

कृष्णा(हिं)— क्रुष्णा (उ) आदि ।

बाँगला शब्द के उदाहरण —

बनाना (हिं)— बनानो (बां)

हम (हिं) —हाम (बां)

वचन-प्रयोग के कारण

इकारांत और उकारांत शब्दों के बहुवचन में रूपांतरित होने पर शब्दों की वर्तनी में प्रायः परिवर्तन हो जाता है । "ई" "इ" में और "ऊ" "उ" में बदल जाता है । जैसे—

बकरी —— बकरियाँ

बहू —— बहुएं

(दृष्टव्य_जातिवाचक संज्ञारूपों के साथ ऐसा रूपांतर प्रायः नहीं होता है । जैसे—
भारतीय —— भारतीयों)

प्रतिभागी वर्तनीगत उलझन के कारण या तो मात्रा-परिवर्तन नहीं करते अथवा जातिवाचक शब्दों में अभ्यासवश मात्रा में बदलाव कर देते हैं जो कि त्रुटिपूर्ण होता है । जैसे—

लड़की —— लड़कीयाँ

बकरी —— बकरीयाँ,

नदी —— नदीयाँ

भारतीय —— भारती॑यों

उल्लेखय है कि परिवर्तित किये गए शब्दों की वर्तनी त्रुटिपूर्ण है ।

अपरिवर्तित वर्तनी वाले शब्द

हिंदी में दीर्घ इकरांत वाले कुछ ऐसे शब्द हैं जिनमें परिवर्तन नहीं होता परंतु प्रतिभागी प्रायः पूर्व अभ्यास के कारण दीर्घ मात्राओं को ... ह्रस्व मात्रा में लिखते हैं। जैसे —

"दही" का रूप परिवर्तित नहीं होता लेकिन उसे "दहियाँ" के रूप में प्रयोग करना दोषपूर्ण है । कहीं-कहीं ऐसा भी दिखाई देता है कि अनुस्वारयुक्त शब्दों को अनुस्वार-रहित करके लिख दिया जाता है । जैसे - मे, कही, नही, उन्होने, जिन्होने इत्यादि । अनुस्वार के प्रयोग के अभाव में कभी ऐसी स्थिति आ जाती है कि शब्द का अर्थ एकदम बदल जाता है । जैसे —

कंस —— कस

वंश —— वश

कहीं —— कही

वहीं —— वही

कभी-कभी अनुस्वार (.) और अनुनासिक (ँ) में भेद न कर सकने के कारण वर्तनीगत अशुद्धि हो जाती है । जैसे — अगर "हंस" को इस रूप में न लिखकर अनुनासिक (ँ) के साथ लिखते हैं, तो वर्तनी "हँस" हो जाएगी जो क्रियावाची बनकर सर्वथा भिन्न अर्थ देगी क्योंकि "हंस" एक पक्षी का अर्थ देता है, और "हँस" हँसना क्रिया का एक रूप है ।

४. क्रियाकलापों को पूरा करने की कार्यप्रणाली:-

अशुद्ध वर्तनी के निराकरण के लिए सर्वप्रथम मातृभाषा और हिंदी की प्रकृति बताकर, उनमें विवेक पैदा करना होगा । इस तरह हिंदी-वर्तनी को लिखते समय प्रतिभागी अपनी मातृभाषा के उस प्रभाव से स्वयं को बचा सकते हैं जो हिंदी भाषा सीखने की प्रक्रिया को बाधित करता है ।

बोलना और लिखना एक दूसरे से संबद्ध होता है । वर्तनी-शिक्षण के लिए

बोलने के लिए विभिन्न विषयों (सामाजिक, व्यक्तिगत एवं परिवेशगत विषयों) को चुन सकते हैं । विषयों के बोले गये अंशों के लिखने का अभ्यास कराया जाए । इस प्रकार बोलने एवं लिखने में तारतम्य स्थापित हो सकेगा । बोलने और लिखने में तारतम्य होने पर प्रतिभागियों का आत्मविश्वास बढ़ेगा और तब आदर्श पाठ-प्रक्रिया, उसके वर्तनी-विवेक के निर्माण में सहायक सिद्ध हो सकती है । इस क्रम में छपे हुए विषयों का पाठ भी आवश्यक है । फिर पठन-प्रक्रिया, लेखन-प्रक्रिया एवं वाचन-प्रक्रिया संपन्न होनी चाहिए ।

लेखन-प्रक्रिया के परीक्षण तथा विश्लेषण से यदि परिलक्षित हो कि मात्राज्ञान में कमी है, तो मात्राज्ञान को सुधारने का कार्य करना अपेक्षित है । उदाहरण-हेतु यदि विद्यार्थी "विधि" को "विधी" रूप में लिखना है, तो सर्वप्रथम उससे "विधि" के शुद्ध उच्चारण का अभ्यास करवाना होगा । इस क्रम में उसे बताना होगा कि "ध" को ह्रस्व इ (ि) के साथ उच्चरित करना होगा और "धि" रूप में लिखना भी होगा । फिर मिलते-जुलते शब्दों को लिखवाकर इसका अभ्यास भी करवाना होगा —

विधि

निधि

प्रविधि

जलधि.

आवश्यकतानुसार इसे व्यक्तिगत और सामूहिक — दोनों स्तरों पर करवाना आवश्यक है ।

मुद्रण के तकनीकी विकास के परिप्रेक्ष्य में हिंदी के कुछ वर्तनी रूपों को सरल बनाने का यत्न किया गया है । जैसे —

अङ्ग ——— अंग

बन्धु ——— बंधु

यहाँ पंचमाक्षर का सूत्र स्पष्ट करना होगा अर्थात् प्रत्येक वर्ग की व्यंजन ध्वनियों के साथ जब उसी वर्ग की अनुनासिक ध्वनि आती है, तब अनुस्वार चिह्न न होकर अनुनासिक ध्वनि (पंचामक्षर) का अर्द्धरूप-युक्त संयुक्ताक्षर निर्मित होता है । जैसे —

चञ्चल अर्थात् 'ञ्च'; मङ्गल अर्थात् 'ङ्ग';

ठण्ड 'ण्ड'; दन्त अर्थात् "न्त" ।

इसके विपरीत इन सबका सरलीकृत रूप—चंचल, मंगल, ठंड, दंत होता है। अतः प्रतिभागियों को वर्तनी के दोनों रूपों से परिचित कराना आवश्यक है ।

हिंदी के जिन संयुक्ताक्षरों से युक्त वर्तनी का उच्चारण बाँगला और उड़िया में भिन्न तरीके से होता है, उनका ज्ञान कराने के लिए प्रतिभागियों को हिंदी के संयुक्ताक्षरों से युक्त शब्दों की वर्तनी का परिचय देते हुए, अभ्यास करवाना चाहिए । जैसे —

स्मृति, स्वीकार ।

इस तरह के रूपों में पहला व्यंजन आधा और बादवाला पूरा लिखा जाता है । प्रतिभागियों को वर्तनी-बोध के लिए इस प्रक्रिया का पूरा ज्ञान आवश्यक है । अतः उच्चारण कराते हुए लिखाना चाहिए और आवश्यकता पड़ने पर, यदि प्रतिभागी को अँग्रेज़ी का ज्ञान हो तो, अँग्रेजी अक्षरों की सहायता ली जा सकती है । जैसे —

स्वी . — Swee

स्मृ —— Smri

इसी तरह य — Ya

व —— Wa आदि ।

निजी भाषा के मात्रा-संस्कार के कारण प्रतिभागियों में लक्ष्य भाषा की वर्तनी में विशेषतः ह्रस्व और दीर्घ मात्राओं के संदर्भ में कठिनाई होती है । जैसे — फूल, दूध आदि शब्दों की वर्तनी में प्रायः ह्रस्व उ का प्रयोग अनायास, अभ्यासगत हो जाता है । जैसे — फुल, दुध । अतः दीर्घमात्रावाले शब्दों को बार-बार लिखवाना चाहिए —

जैसे — सूना

चूना

छूना

पूत

सूत

इससे शब्द विशेष का शुद्ध रूप मन में बैठ जाएगा ।

इसी तरह विदेशी या तत्सम शब्दों की हिंदी में प्रचलित वर्तनी का ज्ञान कराना आवश्यक है । प्रतिभागियों पर उनकी मातृभाषा में प्रचलित शब्दों की वर्तनी का प्रभाव रहना स्वाभाविक है । अतः धैर्यपूर्वक बारंबार वाचन के माध्यम से हिंदी वर्तनी का ज्ञान कराना होगा। फिर वर्तनी-लेखन के अभ्यास से, वर्तनी का शुद्ध रूप मन में बैठ जाएगा ।

मात्रा के अशुद्ध प्रयोग की समस्या को दूर करने के लिए देखना होगा कि कौन-सी मात्रा ग़लत हो रही है । रेफ और अनुस्वार के प्रयोग-स्थानों को चिह्नित करके बताना चाहिए । आवश्यकता होने पर वर्ण-विन्यास की सहायता ली जा सकती है । जैसे—

मर्मर — म र् म र

निर्झर — निर् झ र

अर्थात् 'मर्मर' में रेफ-मुक्त व्यंजन ध्वनि "र" है । इस तरह के विश्लेषण से प्रतिभागी के सामने मात्रा-प्रयोग का चित्र साफ हो जाएगा ।

चिह्न में "ह्न" के प्रयोग में प्रायः वर्ण-विन्यास बदल ही जाता है । यह अनायास होता है । इसलिए इसका भी वर्ण-विन्यास करके दिखाना ज़रूरी है —

चि ह् न (चिह्न)

आ ह् वा न (आह्वान)

प्रतिभागियों को बताना होगा कि शब्द के साथ जब "करण" जुड़ता है, तो ह्रस्व ध्वनि, दीर्घ में रूपांतरित हो जाती है । जैसे —

प्रस्तुति + करण = प्रस्तुतीकरण,

शुद्धि + करण = शुद्धीकरण

शब्दों के साथ जब प्रत्यय या उपसर्ग जुड़ता है, तो उसके रूप/अर्थ-परिवर्तन की विशेषताओं को प्रतिभागियों को लिखित रूप में बताना आवश्यक है। जैसे — स्थान में "प्र" उपसर्ग जुड़कर "प्रस्थान" शब्द निर्मित हुआ है । "स्थान" का अर्थ है— जगह । लेकिन "प्र" उपसर्ग के जुड़ने से जो "प्रस्थान" शब्द बना, उसका अर्थ है — चलना ।

इसी प्रकार प्रतिभागियों को संधि के नियमों की जानकारी दी जाए । इससे वर्तनी संबंधी कई अशुद्धियाँ दूर हो सकती हैं । संधि के नियमों की जानकारी हो जाने से "उज्ज्वल" "तदुपरांत" के स्थान पर "उज्जवल" या "उज्चल" और "तदोपरांत" जैसा अशुद्ध नहीं लिखा जाएगा । साथ ही, एक ही शब्द के शुद्ध रूप सहित कई अशुद्ध रूपों को विकल्प रूप में दिया जाए । प्रतिभागियों को शुद्ध रूप रेखांकित करने को कहा जाए । जैसे —

मानुष, मानुस, मानूश, मानुप, मनुष्य

जीबन, जीवन, जिवन ।

५. मूल्यांकन

प्रतिभागियों के सक्रिय प्रयास से उन्हें वर्तनी-संबंधी जो ज्ञान हुआ, उसका मूल्यांकन करना, साथ ही, प्रत्येक प्रतिभागी की ग्रहणक्षमता का आकलन करना अपेक्षित है । जैसे विभिन्न मात्रा-सम्पन्न शब्द, एक प्रतिभागी दूसरों के सामने प्रस्तुत करेगा, दूसरे प्रतिभागी इसे स्व-रचित वाक्य में प्रयुक्त करेंगे । दो प्रतिभागियों में से एक ने दूसरे के सामने खट्टा, आम, गिरा, हरा, से, पेड़ शब्द रखा । दूसरे ने वाक्य बनाया — पेड़ से हरा खट्टा आम गिरा ।

निरंतर के अभ्यास से प्रतिभागियों के वर्तनी-बोध का विकास होगा । जितना अधिक अभ्यास होगा, यह बोध उतना ही बढ़ेगा । यह व्यावहारिक पक्ष है । सैद्धांतिक चर्चा पहला स्तर है एवं व्यावहारिक प्रयोग दूसरा स्तर है । व्यावहारिक प्रयोग में — पढ़ना और लिखना उसके कारक तत्त्व हैं । पढ़ने और लिखने की उपलब्धियों के परीक्षण के बाद श्रुतिलेखन करवाना होगा ।

श्रुतिलेखन करवाने में सर्वप्रथम छोटे-छोटे शब्द, तत्पश्चात् छोटे-छोटे वाक्य और फिर अनुच्छेदों को लिया जा सकता है । शब्द, वाक्य और अनुच्छेदों के श्रुतिलेखन में यह ध्यान रखना होगा कि उनमें मात्राओं का भी श्रुतिलेखन करवाया जाए ।

अध्यापक/अध्यापिका मूल्यांकन-प्रक्रिया से विद्यार्थियों के वर्तनी-ज्ञान की परख करें और यदि वर्तनी में अशुद्धियाँ हो रही हों, तो सामूहिक रूप से वर्तनी का शुद्ध रूप लिखवाएं । ऐसा करने से वर्तनी की अशुद्धियाँ अपेक्षाकृत दूर होती जाएंगी ।

क्षेत्रीय शिक्षा संस्थान, भुवनेश्वर

हिंदी प्रशिक्षण पैकेज

१. प्रशिक्षण विषय-वस्तु : अर्थ-बोध-शिक्षण :—

अहिंदी/हिंदी भाषी प्रतिभागियों को हिंदी भाषा का ज्ञान कराते समय अर्थ-बोध-संबंधी अनेक कठिनाइयाँ आती हैं । सभी भाषाओं को सीखने में अर्थ-बोध से जुड़ी समस्याएं आती हैं। इसी तरह हिंदी भाषा सीखते समय विद्यार्थियों के सामने उसे सीखने संबंधी मानसिक अपरिपक्वता, अपरिचित शब्दों के प्रयोग आदि के कारण अर्थ-बोध-प्रक्रिया में कठिनाइयाँ उत्पन्न हो जाती हैं जिससे विशेष रूप से अहिंदी भाषी विद्यार्थियों एवं शिक्षकों, दोनों को हिंदी-शिक्षण-प्रक्रिया में कठिनाइयों का अनुभव होता है । इस संदर्भ में कुछ विशेष बातों पर ध्यान देकर हिंदी सीखना-सिखाना आसान किया जा सकता है ।

२. प्रशिक्षण के उद्देश्य-

हिंदी सिखाते समय अर्थ-बोध-शिक्षण के संदर्भ में निम्नलिखित उद्देश्य निर्धारित किए जा सकते हैं —

क. अर्थ-बोध में आनेवाली कठिनाइयों की जानकारी ।

ख. उनके निराकरण के उपाय सुझाना ।

३. प्रतिभागियों के क्रियाकलाप :-

उपर्युक्त उद्देश्यों की प्राप्ति के लिए प्रतिभागियों से निम्नलिखित क्रियाकलाप कराए जा सकते हैं —

(क) उन्हें स्वेच्छा से कुछ वाक्य बोलने तथा लिखने के लिए प्रेरित करना ।

(ख) प्रतिभागियों को प्रथमतः अर्थ-बोध का तात्पर्य तथा उसके महत्त्व को समझाया जाए ।

(ग) प्रतिभागियों को समूहों में बाँटकर अर्थ-बोध पर परस्पर विचार-विमर्श करने का अवसर देना ।

(घ) उनसे प्रश्न पूछते हुए उनके उत्तर को ध्यान से सुनना ।

इस तरह के क्रियाकलापों को करवाते हुए प्रतिभागियों की अर्थ-बोध-संबंधी क्षमता के विषय में जानकारी प्राप्त होगी । उन अशुद्धियों का विश्लेषण करने पर निम्नलिखित कारण सामने आ सकते हैं —

अपरिचित शब्दों का प्रयोग

अहिंदी भाषा-भाषियों के समक्ष, पाठ्य पुस्तक पढ़ते समय, अवधी, व्रज, अरबी-फ़ारसी, आदि भाषाओं के शब्दों की उपस्थिति से अर्थ-बोध में बाधा उत्पन्न हो सकती है । जैसे —— हौं (व्रजभाषा), सौंसत (अवधी), ज़रा (अरबी) आदि शब्दों की जानकारी न होने के कारण प्रतिभागियों को अर्थ-बोध-प्रक्रिया में कठिनाई हो सकती है । यदि विद्यार्थी हिंदी भाषभाषी है तो उसके सामने भी ऐसी समस्या आ सकती है, क्योंकि यदि उसकी मातृभाषा अवधी है, तो वह व्रजभाषा-प्रयोगों को समझने में कठिनाई का अनुभव कर सकता है । इसी तरह, व्रजभाषा-भाषी विद्यार्थी को अवधी-प्रयोगों को समझने में असुविधा हो सकती है ।

उपर्युक्त प्रसंग की जानकारी का न होना।

उपर्युक्त प्रसंग में शब्द-प्रयोग न होने से अर्थ-वोध में कठिनाई आती है । जैसे, पंकज और नीरज, ये दोनों "कमल" के पर्याय हैं लेकिन प्रसंग-सापेक्ष दोनों के प्रयोग किये जाने चाहिए । कारण, दोनों की अर्थ-व्यंजना भिन्न-भिन्न है ।

आधारभूत पृष्ठभूमि से अवगत न होना

शब्द विशेष की आधारभूत पृष्ठभूमि की जानकारी न होने की वजह से अर्थ-बोध में कठिनाई उत्पन्न हो सकती है । जैसे - "मृगराज" शब्द को लिया जा सकता है । यदि हम "मृग" शब्द का हिरणवाची अर्थ ही जानते हैं तो मृगराज के सिंह विषयक अर्थ को ग्रहण करने में कठिनाई आती है लेकिन जब हमें विदित होता है कि पहले "मृग" शब्द से पशु का भी अर्थ लिया जाता था, तब पशुओं का राजा अर्थात् सिंह (मृगराज) वाची अभिप्राय प्रकट होता है।

वर्तनी का अशुद्ध प्रयोग

वर्तनी के अशुद्ध प्रयोग से अर्थ-बोध में बाधा आती है । जैसे — "दिन" के स्थान पर अगर "दीन", कुल के स्थान पर "कूल" लिख दिया जाए, तो अर्थ एकदम भिन्न हो जाएगा । फलस्वरूप अर्थ-बोध में भ्रम उत्पन्न होगा ।

मातृभाषा और हिंदी में प्रयुक्त सामान्य शब्द की अर्थ-भिन्नता

अहिंदी भाषी शिक्षार्थी, हिंदी भाषा को सीखते समय कभी-कभी ऐसी स्थिति में पड़ जाता है कि उसकी मातृभाषा और हिंदी, दोनों में, रूप के आधार पर तो कई शब्द एक समान होते हैं किंतु उनमें अर्थ-भेद होता है । उदाहरणार्थ "पुआ" शब्द को लिया जा सकता है । उड़िया में यह शब्द बेटे के लिए प्रयुक्त होता है, जबकि हिंदी में

एक खाद्य पकवान का अर्थ देता है । इसी तरह "दया" शब्द को देखा जा सकता है । हिंदी में "दया" शब्द किसी व्यक्ति की दयनीय स्थिति को देखकर, उससे सहानुभूति, करुणा दिखाने के लिए व्यवहृत होता है जबकि उड़िया में इसे "कृपया" के अर्थ में प्रयुक्त करते हैं । इस संदर्भ में "चिता" शब्द को देखा जा सकता है । उड़िया में, धार्मिक अनुष्ठान में ज़मीन पर हाथ से बनायी गयी अल्पना के लिये यह शब्द प्रयुक्त होता है, जबकि हिंदी में, यह हिंदुओं के मरणोपरांत दाह-संस्कार हेतु लकड़ियों को एकत्रकर बनाए गए ढेर के लिए व्यवहृत होता है ।

४. क्रिया-कलापों को पूरा करने की कार्यप्रणाली:-

अर्थ-बोध संबंधी कठिनाइयों और उनके कारणों की जानकारी करने के बाद अपेक्षित है कि उनको दूर करने के उपायों पर विचार किया जाए । यहाँ क्रमशः ऐसे सुझावों का उल्लेख किया जा रहा है —

अपरिचित शब्दों के प्रयोग से उत्पन्न कठिनाइयों और भ्रांतियों को दूर करने के लिए प्रतिभागियों को यह बताना चाहिए कि वे जहाँ तक हो सके, वाक्य में अपरिचित शब्दों का प्रयोग न करें । यदि पाठ्यपुस्तक में ऐसे शब्द हों, तो भाषा-शिक्षक/शिक्षिका से अपेक्षित है कि वे उनके स्रोत तथा अर्थ से शिक्षार्थियों को अवगत कराएं । जैसे —

हौं (ब्रजभाषा) — मैं

साँसत(अवधी) — बहुत बड़ा कष्ट

ज़रा (अरबी) — थोड़ा

शब्द का उपयुक्त प्रसंग में व्यवहार न होने के कारण अर्थ-बोध में बाधा आती है। ऐसी स्थिति में भाषा-शिक्षक/शिक्षिका को चाहिए कि वे प्रसंग को भली-भाँति समझाएं और तत्पश्चात् शब्द का प्रसंग-सापेक्ष प्रयोग करवाएं । उदाहरणार्थ यदि विषम परिस्थिति और दयनीय दशा में पड़े किसी परिवार का बच्चा प्रगति करके ख्याति अर्जित करता है, तो उसके लिए "नीरज" का प्रयोग न करवाकर "पंकज" का व्यवहार करना ठीक होगा । कारण यह कि "नीरज" स्वच्छ जल (नीर) में निकले कमल के लिए प्रयुक्त होता है, जबकि कीचड़ (पंक) में विकसित कमल के लिए "पंकज" का व्यवहार होता है । इसको इस तरह भी समझाया जा सकता है —

"नीर" से जन्मा —— नीरज

"पंक" से जन्मा —— पंकज

कभी-कभी वाक्य में ऐसे शब्द आ जाते हैं जिनकी आधारभूत पृष्ठभूमि की जानकारी न होने से प्रतिभागी को अर्थ-बोध में कठिनाई होती है । ऐसी दशा में प्रतिभागियों को शब्द विशेष की पृष्ठभूमि की जानकारी दी जानी चाहिए । कहने का तात्पर्य है कि सीखनेवाले के समक्ष किसी घटना का उल्लेख किया जाए । जैसे — "अभियान" शब्द को लिया जा सकता है। इस शब्द को समझाने के लिए परिवेश में सफाई के अभाव में उत्पन्न होनेवाली समस्याओं तथा सफाई के लिये अपेक्षित सामूहिक प्रयास के संबंध में समझाया जाए और यह बताया जाए कि किसी समस्या को हल करने के लिए सामूहिक महत् प्रयास "अभियान" कहलाता है । इस प्रकार, आधारभूत पृष्ठभूमि की जानकारी देने से प्रतिभागी "अभियान" शब्द का अर्थ समझ सकता है ।

वर्तनी के अशुद्ध प्रयोग से अर्थ-बोध में बाधा उत्पन्न हो सकती है । इस कठिनाई को दूर करने के लिए प्रतिभागियों को बताना चाहिए कि शब्द-प्रयोग करने के क्रम में वर्तनी का शुद्ध रूप व्यवहृत करें । इसके लिए शिक्षक/शिक्षिका श्यामपट पर "कुल" और "कूल" दोनों शब्दों को लिखें एवं दोनों का अर्थ-भेद बताएं ताकि अर्थ-बोध की कठिनाई दूर हो । उदाहरणार्थ —

कुल — समूह/जोड़

कूल — किनारा

दोनों के अर्थ स्पष्ट करने के बाद शिक्षक/शिक्षिका विद्यार्थियों को "कुल"/"कूल" को प्रयुक्त करते हुए अलग-अलग वाक्य-निर्मित करने के लिए कहें और सही वाक्य-प्रयोगों को विद्यार्थियों से श्यामपट पर लिखवाएं ।

मातृभाषा और हिंदी में प्रयुक्त समान शब्द की अर्थ-भिन्नता से उत्पन्न कठिनाई को दूर करने के लिए हिंदी भाषा-शिक्षक/शिक्षिका को चाहिए कि वे प्रतिभागी की मातृभाषा और हिंदी भाषा का तुलनात्मक अध्ययन करें । इस संदर्भ में समान-असमान शब्दों की सूची को दो भागों में वर्गीकृत किया जा सकता है —

(१) रूप और अर्थ, दोनों की दृष्टि से समान ।

(२) रूप की दृष्टि से समान, लेकिन अर्थ की दृष्टि से असमान ।

ऐसी सूची बनाकर हिंदी भाषा-शिक्षक/शिक्षिका इस बात से भली-भाँति अवगत हो जाएगा/जाएगी कि अहिंदी भाषी शिक्षार्थी, हिंदी सीखने के क्रम में, किन-किन शब्दों के प्रयोग के

के संदर्भ में भ्रमित हो सकता है और उस भ्रम को दूर करने में शिक्षक/शिक्षिका को अपेक्षाकृत सफलता मिल सकती है ।

५.. मूल्यांकनः—

अंतिम बिंदु मूल्यांकन का है । मूल्यांकन की प्रक्रिया का महत्त्व इस बात में है कि इसके आधार पर इस बात की जाँच कर सकते हैं कि आरंभ में जो उद्देश्य निर्धारित किये गए थे, उनकी प्राप्ति किस सीमा तक हुई । प्रशिक्षण के उद्देश्य से प्रतिभागियों के क्रियाकलाप जुड़े होने चाहिए ।

इस चरण में प्रतिभागियों को अर्थ-बोध संबंधी प्रश्न दिये जाएं । इस क्रम में उन्हें कुछ शब्द देकर उनके अर्थ लिखने को कहा जाए । इसके अतिरिक्त प्रतिभागियों को कुछ वस्तुनिष्ट प्रश्न दिये जा सकते हैं । उदाहरणार्थ, किसी शब्द के अर्थ के लिए चार मिलते-जुलते विकल्प दिये जाएं जिनमें से एक ही शुद्ध हो । विद्यार्थियों से उचित विकल्प पर सही (✓) का चिह्न लगाने के लिए कहा जाए ।

मूल्यांकन के अंतगर्त कुछ शब्दों को उल्लिखित किया जाए और उनके अर्थ भी दे दिये जाएं । तदुपरांत प्रतिभागियों को निर्देश दिये जाएं कि वे निर्दिष्ट अर्थ को ध्यान में रखते हुए वाक्य-रचना करें ।

इसके अतिरिक्त कुछ ऐसे शब्द चुनकर दिए जाएं जो रूप की दृष्टि से मातृभाषा और हिंदी, दोनों में एक जैसे प्रयुक्त होते हों लेकिन अर्थ के स्तर पर उनमें भिन्नता हो । प्रतिभागियों को निर्देश दिये जाएं कि वे उस शब्द का वह अर्थ लिखें जो उनकी मातृभाषा में व्यवहृत होता हो, फिर उसी शब्द का वह अर्थ लिखें जो हिंदी में प्रयुक्त होता हो ।

क्षेत्रीय शिक्षा संस्थान, भुवनेश्वर
हिंदी प्रशिक्षण पैकेज

१. प्रशिक्षण विषय-वस्तुः वाक्य-संरचना शिक्षण :—

अहिंदी भाषी क्षेत्र के शिक्षक/शिक्षिका एवं शिक्षार्थियो की हिंदी भाषा का ज्ञान करते-करवाते समय, "वाक्य-संरचना" के संदर्भ में कई कठिनाइयें उत्पन्न हो सकती हैं । यों तो हिंदी भाषियों को भी वाक्य-संरचना की प्रक्रिया को समझने की आवश्यकता पड़ सकती है, किंतु अहिंदी भाषा-भाषियों को हिंदी सीखते समय लिंग-भेद, वचन-भेद तथा कुछ कारकों की विभक्तियें के कारण वाक्य-संरचना में उपस्थित होनेवाली समस्याओं का विशेष रूप से सामना करना पड़ सकता है । उड़िया और बाँगला भाषा के विषय में कहा जा सकता है कि इनमें लिंग-भेद के कारण वाक्य की क्रिया में कोई परिवर्तन नहीं होता है । यही कारण है कि उड़िया और बाँगला भाषी शिक्षक/शिक्षिका एवं शिक्षार्थी हिंदी-शिक्षण प्रक्रिया में कठिनाइयें का अनुभव करते हैं । इस संदर्भ में कुछ विशेष बातें पर ध्यान देकर हिंदी सीखना-सिखाना सरल किया जा सकता है ।

२. प्रशिक्षण के उद्देश्य :-

हिंदी सिखाते समय वाक्य-संरचना के संदर्भ में निम्नलिखित उद्देश्य निर्धारित किए जा सकते हैं—

(क) वाक्य-संरचना में कठिनाइयें की जानकारी ।

(ख) उनके निराकरण के उपाय सुझाना ।

३. प्रतिभागियों के क्रियाकलाप :-

उपर्युक्त उद्देश्यों की प्राप्ति के लिए प्रतिभागियों से निम्नलिखित क्रियाकलाप कराए जा सकते हैं--

(क) प्रतिभागियें को स्वेच्छा से कुछ वाक्य-रचना करने के लिए प्रेरित करना ।

(ख) उन्हें किसी विषय पर लिखने के लिए प्रोत्साहित करना ।

(ग) उन्हें समूह में बाँटकर उनसे "वाक्य-संरचना" के नियमों तथा वाक्य-संरचना में आगत कठिनाइयें के विषय में परस्पर विचार-विमर्श करवाना ।

इस प्रकार के क्रियाकलापों को करवाने से प्रतिभागियें की वाक्य-संरचना संबंधी दक्षता को जानने का अवसर मिलेगा । उनकी अशुद्धियें का विश्लेषण करने पर निम्नलिखित संभावित कारण प्रकाश में आ सकते हैं--

मातृभाषा का प्रभाव

बाँगला और उड़िया भाषा में वाक्य के कर्त्ता के लिंग का क्रिया पर प्रभाव नहीं पड़ता, जबकि हिंदी भाषा में पड़ता है---

बाँगला	उड़िया	हिंदी
राम वाड़ी जाच्छे ।	राम घर कू जाउछी ।	राम घर जाता है ।
सीता वाड़ी जाच्छे ।	सीता घर कू जाउछी ।	सीता घर जाती है ।
अब्दुल वाड़ी जाच्छे ।	अब्दुल घर कू जाउछी ।	अब्दुल घर जाता है ।

इस कारणवश बाँगला और उड़िया भाषियों से हिंदी भाषा की वाक्य-रचना में क्रिया-प्रयोग की भूल हो सकती है, जैसे —

राम घर जाता है । (शुद्ध)

सीता घर जाता है । (अशुद्ध)

अब्दुज घर जाती है । (अशुद्ध)

जानकारी न होने के कारण

कर्त्ता कारक की विभक्ति "ने" के प्रयोग के नियमों को न जानने के कारण, प्रायः अहिंदी भाषी छात्र और शिक्षक/शिक्षिका वाक्य-रचना में त्रुटि कर सकते हैं, जैसे —

गीता ने भात खायी ।

पाल ने रोटी खाया ।

कभी-कभी विभक्ति का लोप मिलता है, जैसे —

माँ कहानी कही ।

मैं पाठ पढ़ लिया हूँ ।

कभी-कभी आवश्यकता न होने पर भी "ने" का प्रयोग मिलता है, जैसे —

आज मैंने स्कूल नहीं गया ।

उसने हँसा ।

जानकारी न होने के कारण निम्नलिखित भूलें देखने को मिलती हैं---

(क) विभक्ति की वचन से असंगति — जैसे:- राम के घोड़ा ।

प्रशांत का बेटे ।

(ख) विभक्ति की लिंग से असंगति — जैसे:- जॉन की नई मकान ।

मदन का पुस्तक ।

विद्यालय के कुछ लड़कियाँ पढ़ने में अच्छी हैं ।

४. क्रियाकलापों को पूरा करने की कार्य-प्रणाली:-

वाक्य-संरचना संबंधी अशुद्धियों तथा उनके कारणों की जानकारी प्राप्त करने के बाद अपेक्षित है कि उनको दूर करने के उपाय भी सुझाए जाएं । यहाँ क्रमशः ऐसे सुझावों का उल्लेख किया जा रहा है ।

प्रतिभागी मातृभाषा की वाक्य-संरचना तथा हिंदी भाषा की वाक्य-संरचना के नियमों के बारे में जानकारी करे । वह पहले श्यामपट पर उदाहरण के लिए कुछ वाक्य लिखे, जैसे —

उड़िया भाषा में —

बालिकाटि जाउछी ।

बालकटि जाउछी ।

बाँगला भाषा में —

मेयेटि जाच्छे ।

छेलेटि जाच्छे ।

हिंदी भाषा में —

लड़की जा रही है ।

लड़का जा रहा है ।

हिंदी सीखनेवालों की वाक्य-संरचना में जो दोष आ जाते हैं, उनको दूर करने के लिए वाक्य-संरचना संबंधी सामान्य नियमों की जानकारी करायी जाए ।

प्रतिभागियों को विभक्ति-सहित एवं विभक्ति-रहित वाक्य-संरचना के नियमों की जानकारी दी जाए । उदाहरणार्थ, उन्हें बताया जा सकता है कि —

जब कर्त्ताकारक की विभक्ति "ने" हो, तो क्रिया, कर्त्ता के लिंग, वचन और पुरुष के अनुसार न होकर कर्म के लिंग, वचन और पुरुष के अनुसार होगी, जैसे —

लड़की ने रोटी खाई ।

लड़की ने भात खाया ।

राम ने रोटी खाई ।

स्त्री ने गीत गाया ।

जब कर्त्ता कारक की विभक्ति "ने" न हो, तो क्रिया, कर्त्ता के लिंग, वचन और पुरुष के अनुसार होगी, जैसे —

सीता आती है ।

राम जाता है ।

५. मूल्यांकन :—

अंतिम बिंदु मूल्यांकन का है । इसका महत्त्व तथा उपयोगिता इस बात में निहित है कि इसके आधार पर हम इस बात की जाँच कर सकते हैं कि आरंभ में जो उद्देश्य निर्धारित किये गए थे, उनकी प्राप्ति किस रूप में हुई । इस तरह, मूल्यांकन-कार्य, प्रशिक्षण के उद्देश्य, प्रतिभागियों के क्रियाकलाप, क्रियाकलापों को पूरा करने की कार्यप्रणाली से संबद्ध होना चाहिए ।

इस चरण में प्रतिभागियों से वाक्य-संरचना संबंधी प्रश्न दुहराए जाएं और वाक्य देकर उनकी शुद्धि-अशुद्धि की क्षमता का पता लगाया जाए । इससे उनकी वाक्य-संरचना संबंधी क्षमता का पता लगेगा और उनके दोषों में कितना सुधार हुआ है, इसकी भी जानकारी हो सकेगी। यदि कहीं कुछ दोष रह जाते हैं, तो अध्यापक/अध्यापिका को पूर्व कराए गए क्रियाकलापों का और अधिक अभ्यास करवाना होगा और आवश्यकतानुसार वह नई कार्यप्रणाली भी उसमें जोड़ सकता/सकती है ।

उनका विश्लेषण करने पर निम्नलिखित संभावित कारण प्रकाश में आ सकते हैं —

मातृभाषा का प्रभाव

अहिंदी भाषा-भाषियों से, मातृभाषा के प्रभाव के कारण, हिंदी सीखते समय लिंग-प्रयोग संबंधी अशुद्धियाँ हो सकती हैं । बाँगला और उड़िया में लिंग-व्यवस्था, हिंदी से भिन्न है । वह इस रूप में कि इन दोनों भाषाओं में, पुलिंग, स्त्रीलिंग और नपुंसक (क्लीव) लिंग की अवधारणा तो है लेकिन उनका व्याकरणिक प्रयोग नहीं होता । इसके विपरीत, हिंदी में सिर्फ दो लिंग हैं— पुलिंग और स्त्रीलिंग । साथ ही, हिंदी में लिंग-प्रयोग व्याकरणिक है । ऐसी स्थिति में बाँगला और उड़िया भाषा-भाषियों द्वारा हिंदी-प्रयोग करने के क्रम में लिंग-निर्धारण की समस्या प्रायः आ जाती है । यह कठिनाई विशेष रूप से उन शब्दों को लेकर हो सकती है जिन्हें इन भाषाओं में नपुंसकवाची माना जाता है । उदाहरणार्थ "डंडा" शब्द को लिया जा सकता है । हिंदी में यह शब्द पुलिंगवाची है, लेकिन बाँगला और उड़िया भाषी इसे नपुंसकवाची के रूप में समझते हैं । हिंदी में इसे स्त्रीलिंग में रखें या पुलिंग में, इस बात को लेकर वे भ्रमित हो सकते हैं ।

जानकारी न होने के कारण

कभी-कभी एक वस्तु के दो पर्यायशब्द भिन्न लिंग में प्रयुक्त होते हैं और तत्संबंधी ज्ञान न होने के कारण लिंग-निर्णय में असुविधा हो सकती है, जैसे —

वायु (स्त्री)

पवन (पु)

ये दोनों शब्द "हवा" के पर्याय होते हुए भी, भिन्न लिंगों में व्यवहृत होते हैं ।

ऐसा भी संभव है कि एक ही शब्द दो भिन्न अर्थों में प्रयुक्त हो और दोनों संदर्भों में लिंग की भिन्नता दिखाई दे, जैसे —

"हार" शब्द को देखा जा सकता है । यह शब्द "पराजय" के अर्थ में आने पर स्त्रीलिंग के रूप में प्रयुक्त होता है, जबकि "माला" के रूप में इसका लिंग, पुलिंगवाची हो जाता है ।

सादृश्य के कारण

कभी-कभी शब्दों में सादृश्य (स्वरूप आदि के आधार पर) के कारण लिंग-निर्णय भी तद्नुरूप कर देने की आशंका हो जाती है, जैसे —

कौआ (पु), कोयल (स्त्री)

ये पक्षी स्वरूप के आधार पर परस्पर सादृश्य रखते हैं । ऐसी स्थिति में लिंग-निर्धारण-क्रम में पुलिंग को स्त्रीलिंग या स्त्रीलिंग को पुलिंग किया जा सकता है ।

व्यक्तिगत कारण

कई बार प्रतिभागी वाक्य बनाने के क्रम में, अपने लिंग के अनुरूप सर्वनाम का प्रयोग कर देते हैं जिससे लिंग-प्रयोगगत अशुद्धि हो जाती है, जैसे —

मेरी नाम सीता है ।

वचन का प्रभाव

प्रतिभागी कभी-कभी एकवचन में सही लिंग का प्रयोग करते हैं, किंतु उसी शब्द के बहुवचन रूप में लिंग का दोषपूर्ण प्रयोग कर देते हैं । जैसे —

गाय चरती है । (एकवचन)

गायें चरते हैं । (बहुवचन)

हिंदी में लिंग-विधान संबंधी सुनिश्चित नियम का अभाव

प्रत्येक भाषा की अपनी प्रकृति होती है । उस प्रकृति के अंतर्गत उसकी विभिन्न प्रवृत्तियाँ होती हैं । हिंदी भाषा की यह प्रकृति है कि इसमें लिंग-निर्धारण की ऐसी सुनिश्चित व्यवस्था नहीं है कि उसको आत्मसात् करके सहज रूप से शब्दों को स्त्रीलिंग या पुलिंग में वर्गीकृत करके उनका प्रयोग किया जा सके । ऐसी स्थिति में, हिंदी-प्रयोग करते समय विभिन्न शब्दों के लिंग-निर्धारण में उड़िया/बाँगला भाषी प्रतिभागियों को कठिनाई होती है ।

४. क्रियाकलापों को पूरा करने की कार्यप्रणाली—

प्रतिभागियों के क्रियाकलापों को करवाने के क्रम में जो जानकारियाँ हुईं, उनके परिप्रेक्ष्य में कार्यप्रणाली व्यवहृत करने पर क्रियाकलाप सार्थक निष्कर्ष तक पहुँच सकते हैं । उपर्युक्त संभावित कारणों की जानकारी प्राप्त करने के बाद अपेक्षित है कि उनको दूर करने के उपाय भी सुझाए जाएं । इस संदर्भ में निम्नलिखित बातों पर ध्यान देना उपयोगी हो सकता है —

प्रतिभागी को स्पष्ट कर दिया जाए कि हिंदी में केवल पुलिंग और स्त्रीलिंग का प्रयोग है, उसमें नपुंसक लिंग का कोई विधान नहीं है । अतः प्रत्येक अप्राणिवाचक संज्ञा का या तो पुलिंग में प्रयोग होता है या स्त्रीलिंग में । इसलिए प्रत्येक शब्द के लिंग-निर्णय पर प्रतिभागियों को ध्यान देना आवश्यक है । इसके लिए शिक्षक/शिक्षिका के द्वारा उन्हें लिंग-निर्णय संबंधी अपेक्षित दिशा-निर्देश दिये जाएं ।

प्रतिभागियों को उन पर्यायवाची और भिन्नार्थक शब्दों की जानकारी दे देनी चाहिए, जिनके लिंग में भिन्नता होती है । जैसे—

पवन —— पुलिंग, वायु —— स्त्रीलिंग (पर्यायवाची शब्द)

हार (पराजय) —— स्त्रीलिंग, हार (माला) पुलिंग (भिन्नार्थक शब्द)

यदि ऐसे शब्दों की एक सूची वना दी जाए, तो प्रतिभागियों को लिंग-निर्णय में सुविधा हो सकती है ।

प्रतिभागी को स्पष्ट कर दिया जाए कि सादृश्य - विधान, लिंग-निर्णय का आधार नहीं हो सकता । शिक्षक/शिक्षिका उन्हें कुछ उदाहरण द्वारा समझा सकते/सकती हैं, जैसे—

कौआ — (पुलिंग), कोयल — (स्त्रीलिंग)

प्रत्येक स्थिति में वोलनेवाले (वक्ता) के लिंग के अनुसार वाक्य में शब्दों का लिंग निर्धारित नहीं होता । शिक्षक/शिक्षिका प्रश्नोत्तर के माध्यम से इस बात को स्पष्ट कर सकता/सकती है । उदाहरण —

छात्रा — मेरी नाम सीता है । (अशुद्ध)

अध्यापक/अध्यापिका-मेरा नाम सीता है । (शुद्ध)

छात्र — आज मेरे बहन की शादी है । (अशुद्ध)

अध्यापक/अध्यापिका-आज मेरी वहन की शादी है । (शुद्ध)

अध्यापक/अध्यापिका — उपर्युक्त "शुद्ध" वाक्यों में "नाम" के पुलिंग-प्रयोग से "मेरा" और "वहन" के स्त्रीलिंग-व्यवहार के कारण "मेरी" प्रयुक्त किया गया है ।

प्रतिभागी को यह स्पष्ट कर देना चाहिए कि हिंदी में वचन बदलने से लिंग नहीं वदलता । जैसे —

गाय चरती है । (एकवचन)

गायें चरती हैं । (बहुवचन)

उन्हें बताया जा सकता है कि केवल जहाँ दो विपरीत लिंग के शब्दों को समस्तपद के रूप में या "और" से संयुक्तरूप में अथवा उन दोनों का एक सार्वनामिक रूप देकर प्रयोग किया जाए, तो वहाँ उनका पुलिंग में प्रयोग किया जाता है, जैसे —

माता-पिता मंदिर में पूजा कर रहा है । (अशुद्ध)

माता-पिता मंदिर में पूजा कर रहे हैं । (शुद्ध)

भाई और बहन खेल रहा है । (अशुद्ध)

भाई और बहन खेल रहे हैं । (शुद्ध)

वे (गाय और बैल) चर रहा है । (अशुद्ध)

वे (गाय और बैल) चर रहे हैं । (शुद्ध)

हिंदी में लिंग-निर्णय संबंधी स्थिति के बारे में प्रतिभागियों को बताया जा सकता है कि यह हिंदी की प्रकृति है । इस क्रम में उन्हें अपवाद के साथ जो नियम हैं, उनके विषय में भी जानकारी देनी होगी । यहाँ ऐसे कुछ नियमों को उदाहरणार्थ उल्लिखित किया जा सकता है —

(क) नर प्राणियों के नाम पुलिंग में होते हैं — मोहन, राम, रहीम ।

(ख) मादा (स्त्री) प्राणियों के नाम स्त्रीलिंग में होते हैं — गीता, माला, शकीला ।

(ग) द्रव पदार्थों के नाम प्रायः पुलिंग में होते हैं — दूध, घी, तेल, पानी, सिरका आदि ।

(अपवाद-स्याही आदि स्त्रीलिंग) ।

(घ) रत्नों के नाम प्रायः पुलिंग में होते हैं — हीरा, पन्ना, मूँगा, पुखराज आदि ।

(अपवाद - मणि, मोती, आदि स्त्रीलिंग)

(ङ) भाषाओं के नाम स्त्रीलिंग में होते हैं — हिंदी, बाँगला, उड़िया, गुजराती, आदि ।

इसी तरह विचार करके अन्य नियमों का भी निर्धारण करके (यदि अपवाद हों, तो उन्हें भी बताएं), उनकी सूची प्रतिभागियों को दी जाए । उदाहरण के लिए, शिक्षक/शिक्षिका उन्हें बता सकते/सकती हैं कि अपेक्षाकृत कठोर प्रकृति या बड़े आकार वाली चीज़ें प्रायः पुलिंग होती हैं— पत्थर, लोहा, पहाड़, सोफा, बाल (केश) आदि ।

बाल (केश) से अपेक्षाकृत छोटे आकारवाली होने के कारण मूँछ, दाढ़ी को स्त्रीलिंग की कोटि में रखा जा सकता है ।

(च) हिंदी का लिंग-विधान मूलतः प्रयोगाश्रित है, इस तथ्य की ओर प्रतिभागियों का ध्यान आकर्षित किया जाए और ऐसी स्थिति में अपेक्षित है कि प्रतिभागियों को अध्ययन एवं प्रयोग के ऐसे अवसर दिये जाएं जिससे लिंग-निर्णय पर उनकी पकड़ सशक्त हो सके । उनकी रूचि, अवस्था को देखते हुए उन्हें पत्र-पत्रिकाओं को पढ़ने के लिए प्रेरित किया जाए । इसके अतिरिक्त उन्हें ऐसे लोगों के साथ संवाद करने के अवसर दिये जाएं, जिनका लिंग-प्रयोग-विवेक ठीक हो । इस क्रम में प्रतिभागियों को दूरदर्शन के हिंदी कार्यक्रमों को ध्यान से सुनने के लिए भी कहा जा सकता है ।

५. मूल्यांकन :-

अंतिम बिंदु मूल्यांकन का है । इसका महत्त्व तथा उपादेयता इस बात में है कि इसके आधार पर हम इस बात की जाँच कर सकते हैं कि आरंभ में जो उद्देश्य निर्धारित किए गए थे, उनकी प्राप्ति किस रूप में हुई । प्रशिक्षण के उद्देश्य से प्रतिभागियों के क्रियाकलाप जुड़े होने चाहिए ।

इस चरण में, प्रतिभागियों से लिंग-परिवर्तन एवं प्रयोग-संबंधी ऐसे प्रश्न पूछे जाएं जिनसे पता चल सके कि लिंग-निर्णय संबंधी उनकी कठिनाइयाँ किस सीमा तक दूर हुईं । यदि कहीं कठिनाई रह जाती है, तो अध्यापक/अध्यापिका को पूर्व कराए गए क्रियाकलापों का और अधिक अभ्यास करवाना होगा । प्रत्येक शब्द के लिंग-निर्णय में प्रतिभागी को कहाँ तक सफलता मिली है, अप्राणिवाचक शब्दों के पुलिंग एवं स्त्रीलिंग रूप को पहचानने का उनका ज्ञान कहाँ तक विकसित हुआ है, पर्यायवाची और भिन्नार्थक शब्दों के लिंग-संबंधी उनकी जानकारी किस सीमा तक पहुँची है, इन सबका पता लगाया जाए । इसके लिए प्रतिभागियों को वस्तुनिष्ठ ढंग के प्रश्न दिये जा सकते हैं । वे प्रश्न इस ढंग से निर्मित किये जाएं कि पता चल सके कि प्रतिभागियों का लिंग-संबंधी विवेक किस सीमा तक विकसित हुआ । इनसे उनकी लिंग-निर्णय की क्षमता का पता लगेगा और लिंग-संबंधी दोषों के सुधार में उनकी कितनी प्रगति हुई है, इसकी जानकारी हो सकेगी ।

क्षेत्रीय शिक्षा संस्थान, भुवनेश्वर
हिंदी प्रशिक्षण पैकेज

१. प्रशिक्षण विषय-वस्तु : वचन-शिक्षण :—

अहिंदी/हिंदी क्षेत्र के छात्रों को हिंदी भाषा का ज्ञान कराते समय "वचन" को लेकर कठिनाई पैदा होती है । एकवचन से बहुवचन बनाने की प्रक्रिया सभी भाषाओं में है । एकवचन में प्रायः कोई प्रत्यय जोड़कर ही बहुवचन बनाए जाते हैं । हिंदी में लिंग-भेद के आधार पर बहुवचन रूप बनाने के लिए विभिन्न प्रत्ययों का प्रयोग होता है और कुछ शब्द ऐसे भी होते हैं जिनके बहुवचन रूप, एकवचन जैसे ही होते हैं । उड़िया और बाँगला भाषी शिक्षक/शिक्षिका एवं विद्यार्थी हिंदी सीखने की प्रक्रिया में वचन-प्रयोग में कठिनाई का अनुभव करते हैं । इस संबंध में कुछ विशेष बातों की ओर ध्यान देकर हिंदी वचन-प्रयोगों को सीखना-सिखाना आसान किया जा सकता है ।

२. प्रशिक्षण के उद्देश्य :-

हिंदी सिखाते समय वचन-परिवर्तन के संदर्भ में निम्नलिखित उद्देश्य निर्धारित किए जा सकते हैं--

(क) वचन के दोषपूर्ण प्रयोग के कारणों की जानकारी ।

(ख) उन कारणों को दूर करना ।

३. प्रतिभागियों के क्रियाकलाप :-

उपर्युक्त उद्देश्यों को प्राप्त करने हेतु प्रतिभागियों से निम्नलिखित क्रियाकलाप कराए जा सकते हैं —

(क) कुछ शब्द देकर विभिन्न वचनों के आधार पर प्रयोग के लिए उन्हें प्रेरित किया जाए ।

(ख) सविभक्ति और निर्विभक्ति शब्द देकर विभिन्न वाक्यों में उनका प्रयोग करवाना।

(ग) उन्हें समूह में बाँटकर वचन से प्रभावित, संज्ञा, सर्वनाम, क्रिया आदि के रूपों वाले वाक्यों पर परस्पर विचार-विमर्श का अवसर देना ।

(घ) उनसे प्रश्न पूछते हुए उनके उत्तरों में वचन-संबंधी प्रयोगों को ध्यान से सुनना ।

इस तरह के क्रियाकलापों से प्रतिभागियों की वचन-संबंधी दक्षता को जानने का अवसर मिलेगा । उनकी अशुद्धियों का विश्लेषण करते हुए निम्नलिखित संभावित कारण प्रकाश में आ सकते हैं —

मातृभाषा का प्रभाव

हिंदी में वचन-परिवर्तन करते समय उड़िया भाषी विद्यार्थी मातृभाषा में उपलब्ध प्रत्ययों का प्रयोग कर सकते हैं, जैसे —

सब —— बालिकासब

लोग —— आदमीलोग

यहाँ स्पष्ट है कि उड़िया-भाषी, हिंदी-प्रयोग करते समय संज्ञा शब्दों का बहुवचन रूप देने के स्थान पर उनके एकवचन रूप के साथ सब/लोग/गण जोड़कर वचन-परिवर्तन कर देते हैं ।

जानकारी न होने के कारण

कभी-कभी जानकारी न होने के कारण वचन-परिवर्तन करते समय उसमें विकार आ जाता है । जैसे —

बाबा — बाबे

चाचा — चाचे

चिड़िया — चिड़ियाँएं

सदन — सदनें

विदेशी भाषा की प्रकृति का प्रभाव

हिंदी भाषा में व्यवहार होने वाले विदेशी भाषा के शब्दों का वचन-परिवर्तन प्रायः हिंदी-नियमों के अनुरूप होता है, लेकिन कभी-कभी विदेशी भाषा की प्रकृति के अनुरूप वचन-परिवर्तन कर दिया जाता है, जैसे —

फुट —— फ़ीट

काग़ज़ — काग़ज़ात

स्कूल — स्कूल्स

कॉलेज — कॉलेजेस

वाक्यों में कर्त्ता-क्रिया, संज्ञा-विशेषण आदि की अन्विति न रख पाने पर वचन का संतुलन बिगड़ सकता है । जैसे —

लड़का, जो मेले में अपने मित्रों के साथ घूमने गया था, भीड़ में खो गए ।

समूहवाचक एवं भाववाचक संज्ञाओं के वचन-प्रयोग में भ्रमित हो जाने से, वाक्य के दोषपूर्ण हो जाने की आशंका हो जाती है । जैसे —

सेना जाते हैं ।

मेरे परिवार सुखी हैं ।

भावुकता जागते हैं ।

कभी-कभी आदरणीयों के लिए एकवचन प्रयोग कर दिया जाता है । परिणामस्वरूप वचन-दोष आ जाता है । जैसे —

हमारा शिक्षक पढ़ा रहा है ।

पिताजी मुझे बुला रहा है ।

४. क्रियाकलापों को पूरा करने की कार्यप्रणाली :-

प्रतिभागियों के क्रियाकलापों को करवाने के क्रम में जो जानकारियाँ हुईं, उनके परिप्रेक्ष्य में कार्यप्रणाली व्यवहृत करने पर क्रियाकलाप सार्थक निष्कर्ष तक पहुँच सकते हैं । वचन-परिवर्तन में होनेवाली अशुद्धियों और उनके कारणों की जानकारी प्राप्त करने के बाद उनको दूर करने के लिए कुछ सुझावों को उल्लेख किया जा रहा है —

मातृभाषा के प्रभाव से बाँगला या उड़िया में उपलब्ध प्रत्ययों का अनावश्यक व्यवहार कर दिया जाता है । वहाँ उन्हें ऐसे प्रयोगों से बचाने की कोशिश करनी होगी । बहुवचन में उपलब्ध सही शब्दों को देते हुए इस दोष का निराकरण किया जा सकता है । जैसे —

अशुद्ध	शुद्ध
भाई लोग	भाई
बच्चा लोग	बच्चे

बालिका सब, लड़का लोग_बालिकाएं, लड़के

अज्ञानता के कारण वचन-परिवर्तन में जो दोष आ जाते हैं, उसके लिए हिंदी के वचन-परिवर्तन संबंधी सामान्य नियमों की जानकारी करानी होगी और बीच-बीच में अपवादों की ओर उनका ध्यान आकर्षित कराना होगा । जैसे —

पुलिंग संज्ञाओं के वचन-परिवर्तन संबंधी कुछ नियम —

आकारांत पुलिंग संज्ञाओं के अंत का "आ", बहुवचन में "ए" हो जाता है —

कमरा —— कमरे

लड़का —— लड़के

(निर्देश - यह नियम संस्कृत, अँग्रेज़ी के आकारांत शब्दों पर प्रायः लागू नहीं होता। जैसे — नेता — नेता, ओपेरा — ओपेरा ।)

हिंदी की उन संज्ञाओं में, जो वक्ता से बड़े रिश्तेदारों के लिए प्रयुक्त होती हैं, भी प्रायः "आ" का "ए" नहीं होता । जैसे —

चाचा — चाचा

मामा — मामा

दादा — दादा

आँकारांत पुलिंग संज्ञाओं का "आँ", बहुवचन में "एँ" हो जाता है । जैसे —

कुआँ — कुएँ

धुआँ — धुएँ

"इया" प्रत्ययगत पुलिंग संज्ञाओं में बहुवचन बनने पर अंत के "आ" के स्थान पर" ये"हो जाता है । जैसे —

भेड़िया — भेड़िये

डाकिया — डाकिये

स्त्रीलिंग संज्ञाओं के वचन-परिवर्तन संबंधी कुछ नियम —

जिन स्त्रीलिंग संज्ञाओं के अंत में कोई व्यंजन होता है, अथवा इ/ई के अतिरिक्त कोई स्वर होता है, तो उनके बहुवचन रूप - एँ प्रत्यय जोड़कर बनते हैं । जैसे —

पुस्तक — पुस्तकें

मेज़ — मेज़ें,

वस्तु — वस्तुएँ

भाषा — भाषाएँ

ऊकारांत स्त्रीलिंग संज्ञाओं के बहुवचन रूप बनाने में दीर्घ "ऊ" (ू) के स्थान पर ह्रस्व "उ" (ु) हो जाता है । जैसे —

बहू — बहुएँ

इकारांत स्त्रीलिंग संज्ञाओं के बहुवचन रूप बनाने में शब्दों में "याँ" प्रत्यय लगता है ।

जैसे —

रीति —— रीतियाँ

तिथि —— तिथियाँ

ईकरांत संज्ञाओं के बहुवचन शब्द बनाने में दीर्घ इकारांत "ई" का इकारांत होकर, अंत में "याँ" हो जाता है । जैसे —

बेटी —— बेटियाँ

नदी —— नदियाँ

जिन स्त्रीलिंग संज्ञाओं के अंत में — "इया" होता है, उनके बहुवचन बनने पर अंत में "आ", अनुनासिक "आँ" हो जाता है । जैसे —

चिड़िया —— चिड़ियाँ

बुढ़िया —— बुढ़ियाँ

इसी तरह के अन्य नियम भी बताए जा सकते हैं ।

कई बार प्रतिभागी, कर्त्ता में एकवचन की जगह बहुवचन शब्द प्रयोग कर देते हैं । इस त्रुटि ओर उसका ध्यान आकर्षित किया जाए । जैसे —

"मैं जाता हूँ" की जगह "हम जाता है" ।

विदेशी शब्दों का वचन-परिवर्तन हिंदी नियमों के अनुसार उदाहरण देकर स्पष्ट करना चाहिए । जैसे —

विदेशी भाषाओं की प्रकृति के अनुरूप

मूल शब्द (एकवचन)	बहुवचन रूप	हिंदी प्रकृति के अनुरूप बहुवचन रूप
फ़ुट	फ़ीट	(फ़ुटों)
काग़ज़	काग़ज़ात	(काग़जों)
स्कूल	स्कूल्स	(स्कूलों)
कॉलेज	कॉलेजेस	(कॉलेजों)

लंबे वाक्य देकर कर्त्ता-क्रिया आदि में अन्विति की ओर ध्यान आकर्षित किया जाए। जैसे —

अशुद्ध - लड़का, जो मेले में अपने मित्रों के साथ घूमने गया था भीड़ में खो गए ।

शुद्ध - जो लड़का मेले में अपने मित्रों के साथ घूमने गया था,
भीड़ में खो गया ।

इस वाक्य में कर्त्ता "लड़का" है "मित्रों" नहीं । इसलिए क्रिया, कर्त्ता "लड़का" के अनुसार एकवचन की होगी ।

समूहवाचक एवं भाववाचक संज्ञाएं एकवचन होती हैं । उनकी क्रियाएं भी एकवचन करने की ओर ध्यान आकर्षित किया जाए । जैसे —

अशुद्ध	शुद्ध
सेना जाते हैं ।	सेना जाती है ।
भावुकता जागते हैं ।	भावुकता जागती है ।
मेरे परिवार सुखी हैं ।	मेरा परिवार सुखी है ।

आदरणीयों के साथ क्रिया को बहुवचन में प्रयोग करने की ओर ध्यान आकर्षित किया जाए । इस प्रकार देवता, पूजनीय व्यक्ति, उच्चाधिकारी आदि को लेकर वाक्य बनाकर, उनके वचन-संबंधी दोषों को दूर किया जा सकता है । जैसे —

अशुद्ध	शुद्ध
हमारा शिक्षक पढ़ा रहा है ।	हमारे शिक्षक पढ़ा रहे हैं ।
पिताजी मुझे बुला रहा है ।	पिताजी मुझे बुला रहे हैं ।
तुलसीदास राम का भक्त था ।	तुलसीदास राम के भक्त थे ।

५. मूल्यांकन :-

अंतिम बिंदु मूल्यांकन का है । इसका महत्त्व इस बात में है कि इसके आधार पर इस बात की जाँच कर सकते हैं कि आरंभ में जो उद्देश्य निर्धारित किए गए थे, उनकी प्राप्ति किस सीमा तक हुई । प्रशिक्षण के उद्देश्य से प्रतिभागियों के क्रियाकलाप जुड़े होने चाहिए ।

इस चरण में प्रतिभागियों से वचन-परिवर्तन संबंधी प्रश्न किए जाएं । विदेशी शब्दों के वचन-परिवर्तन संबंधी प्रश्न पूछे जाएं । लंबे वाक्य देकर अन्विति करने की क्षमता का पता लगाया जाए । "है" और "हैं" रूपों के अंतर को प्रतिभागियों ने कितना समझा है, इसकी जाँच करने के लिए उनसे ऐसे वाक्य बनवाए जाएं जिनमें है/हैं का प्रयोग किया जाना अपेक्षित हो । इस संदर्भ में, उनको वस्तुनिष्ठ प्रश्न भी दिये जा सकते हैं । उदाहरणार्थ, मिलते-जुलते चार ऐसे वाक्य उल्लिखित किए जाएं जिनमें है/हैं का प्रयोग किया गया हो । उन्हें निर्देश दिये जाएं कि

वचन के अनुरूप जो वाक्य शुद्ध हो, उसके सामने सही (✓) का चिह्न लगाएं । एकवचन से बहुवचन और बहुवचन से एकवचन शब्द बनवाए जाएं । इससे उनकी वचन-प्रयोग की क्षमता का पता लगेगा और उनके दोषों का कितना निराकरण हुआ है, इसकी भी जानकारी हो सकेगी ।

क्षेत्रीय शिक्षा संस्थान, भुवनेश्वर
हिंदी प्रशिक्षण पैकेज

१. प्रशिक्षण विषय-वस्तु : क्रिया-रूप-शिक्षण :—

अहिंदी/हिंदी भाषी प्रतिभागियों को हिंदी सिखाने के क्रम में विभिन्न कठिनाइयाँ आती हैं, जिनमें से एक है — भाषिक संरचना की विभिन्नता के फलस्वरूप क्रिया-रूपों का वैभिन्न्य । हिंदी भाषा में व्याकरणिक दृष्टि से क्रिया के अभाव में वाक्य की संरचना पूरी नहीं मानी जा सकती। भाषा की शुद्धता, व्याकरण के सही और सटीक प्रयोग पर ही निर्भर है । इस संदर्भ में भावों के प्रकाशन में क्रिया-रूपों का महत्त्व देखा जा सकता है । यहाँ प्रशिक्षण विषय-वस्तु के रूप में क्रिया-रूपों को लिया जा रहा है । भावों एवं विचारों की संपूर्ण अभिव्यक्ति की प्रक्रिया में क्रिया एक प्रमुख कारक तत्त्व है ।

२. प्रशिक्षण के उद्देश्य :-

हिंदी क्रिया-रूप-शिक्षण के क्रम में निम्नलिखित उद्देश्य निर्धारित किये जा सकते हैं—

(क) क्रिया के प्रयोग में आने वाली कठिनाइयों का विश्लेषण ।

(ख) उन कठिनाइयों को दूर करने के उपाय ।

३. प्रतिभागियों के क्रियाकलाप:-

उपर्युक्त उद्देश्यों की प्राप्ति के लिए प्रतिभागियों से विभिन्न क्रियाकलाप कराए जा सकते हैं —

(क) प्रतिभागियों को विभिन्न कार्य-व्यापारों से परिचित करवाना और स्वेच्छा से बोलने के लिए प्रेरित करना ।

(ख) उन्हें किसी निर्धारित विषय पर विचार व्यक्त करने के लिए उत्साहित करना और क्रिया-रूपों को रेखांकित करवाना ।

(ग) कुछ क्रिया-रूपों का वाक्यों में प्रयोग करवाना ।

(घ) उनसे प्रश्न पूछते हुए, उनके उत्तरों को ध्यान से सुनना ।

इस तरह के क्रियाकलापों से प्रतिभागियों के क्रिया-रूपों के प्रयोगों को जानने का अवसर प्राप्त होगा । उन प्रयोगों का विश्लेषण करने पर निम्नलिखित संभावित कारण सामने आ सकते हैं —

<u>मातृभाषा का प्रभाव</u>

विभिन्न भाषिक संस्कारों से आए प्रतिभागियों को, मातृभाषा के प्रभाव के चलते हिंदी सीखते समय क्रिया-रूपों-संबंधी कठिनाइयों का सामना करना पड़ सकता है । बोलने और

लिखने के क्रम में हिंदी के साथ, उड़िया और बाँगला की क्रियाओं का पार्थक्य दिखाई देता है । जैसे —

सोना (हिंदी)

घूमोनो (बाँगला)

सोइबा (उड़िया)

सुलाना (हिंदी)

सोआनो (बाँगला)

सोआइबा (उड़िया)

बनाना (हिंदी)

बानानो (बाँगला)

तियारी करिबा (उड़िया)

इसी प्रकार हिंदी में "खिलता" के लिए, बाँगला में "फोटा" तथा उड़िया में "फुटिअछि" का प्रयोग होता है । जैसे —

फूल खिलते हैं । (हिंदी)

फूल फोटे । (बाँगला)

फूल फूटि अछि । (उड़िया)

क्रिया-रूपों की ऐसी भिन्नता हिंदी सीखनेवाले के समक्ष समस्या उत्पन्न कर सकती है।

क्रिया-रूपों का अंतर कभी-कभी एक-दूसरे रूप में भी दिखाई दे सकता है । जैसे—

नरेन्द्र खा रहा है । (हिंदी)

नरेन्द्र खाच्छे । (बाँगला)

नरेन्द्र खाउअछि । (उड़िया)

स्पष्ट है कि हिंदी में "खा रहा है" में क्रिया-प्रयोग की स्थिति, बाँगला और उड़िया से भिन्न है ।

<u>पूर्वकालिक क्रिया की दृष्टि से</u>

पूर्वकालिक क्रिया-प्रयोग हिंदी और उड़िया में मिलते-जुलते हैं लेकिन बाँगला में अंतर दिखाई देता है —

सोकर पढ़ते हैं । (हिंदी)

सोईकरि पढुअछन्ति । (उड़िया)

सुए - सुए पढ़छे । (बाँगला)

"कर" शब्द का प्रयोग हिंदी और उड़िया, दोनों में विद्यमान है, लेकिन बाँगला में वह मूल क्रिया में परिवर्तित होकर आवृत्त होता है । हिंदी सिखाते समय बाँगला भाषियों को इस अंतर को समझाना होगा ।

क्रियाओं की अर्थगत भिन्नता की दृष्टि से

अर्थगत भिन्नता के कारण भी हिंदी-प्रयोग करवाते समय क्रियागत अशुद्धियाँ हो सकती हैं । जैसे —

बाँगला में "पीने" क्रिया के लिए प्रायः "खाने" का व्यवहार होता है । जैसे —

राम जल खाच्छे ।

सीता जल खाच्छे ।

रहीम जल खाच्छे ।

इस अंतर के कारण बाँगला भाषी, हिंदी-प्रयोग करते समय ऐसा प्रयोग कर सकते हैं —

राम जल खाता है ।

सीता जल खाता है ।

रहीम जल खाता है ।

यही प्रवृत्ति उड़िया भाषियों के हिंदी-प्रयोग में देखी जा सकती है । उड़िया-प्रयोग करते समय, उनका वाक्य-विन्यास निम्नलिखित रूप में देखा जा सकता है —

राम चा खाउछी ।

रहीम चा खाउछी ।

मीरा चा खाउछी ।

ऐसे वाक्य-विन्यास के कारण उड़िया भाषी हिंदी में ऐसा प्रयोग कर सकते हैं —

राम चाय खाता है ।

रहीम चाय खाता है ।

मीरा चाय खाता है ।

४. क्रियाकलापों को पूरा करने की कार्यप्रणाली:-

प्रतिभागियों से करवाए गए क्रियाकलापों के संबंध में जो जानकारियाँ हुईं, उनका विश्लेषण करने पर, क्रिया-प्रयोगों के विषय में उनकी कठिनाइयाँ सामने आयीं जिनके समाधान के लिए निम्नलिखित सुझावों पर विचार किया जा सकता है —

प्रतिभागियों को यह बताना उचित होगा कि उनकी मातृभाषा और हिंदी के क्रिया-रूपों में कहाँ समानता है और कहाँ असमानता । "खा रहा है" (हिंदी), खाच्छे (बाँगला), खाउअछि (उड़िया), जैसे क्रिया-रूपों के भेद की समस्या आने पर, उसे विश्लेषित करने पर विदित होता है कि बाँगला में "है" के बदले "आछे" का प्रयोग है लेकिन उसे व्यवहार में नहीं लाते, लेकिन हिंदी-प्रयोग करते समय "है" के स्थान पर "आछे" का प्रयोग कर सकते हैं । उदाहरणार्थ, हिंदी में "ये मेरी बहन है" के स्थान पर अपनी भाषा के प्रभाव से बाँगलाभाषी "ये आमार बहिन आछे" जैसा प्रयोग कर सकते हैं ।

वस्तुतः बाँगला में "खावा" मूल क्रिया के रूप में व्यवहृत होती है, और उसका परिवर्तित रूप "खाच्छे" प्रयोग में देखा जा सकता है । प्रतिभागियों को बताया जा सकता है कि बाँगला में क्रिया प्रायः मूल या उसके परिवर्तित रूप में आयी है, जबकि हिंदी में "है" के रूप में उसकी अलग से प्रयुक्ति हुई है । इसी तरह, उड़िया में "है" के स्थान पर "अछि" या "अछन्ति" (वचन के अनुसार) प्रयोग करते हैं । उड़िया भाषी प्रतिभागियों को भी इस अंतर के बारे में बताया जाए ।

उल्लेख्य है कि बाँगलाभाषी प्रतिभागी, हिंदी-प्रयोग करते समय अपनी मातृभाषा के प्रभाव के कारण "है" के प्रयोग को छोड़ सकते हैं, क्योंकि वे अपनी भाषा में "आछे" का व्यवहार नहीं करते हैं । इसी तरह उड़िया भाषी प्रतिभागी, मातृभाषा के अभ्यास के कारण हिंदी वाक्य-विन्यास में "अछि" या "अछन्ति" से प्रभावित प्रयोग कर सकते हैं, जैसे—

वह घर <u>जाउअछि</u> । या वे घर <u>जाउअछन्ति</u> ।

इस तरह की समस्याओं को दूर करने के लिए अपेक्षित है कि शिक्षक/शिक्षिका, सीखनेवालों की मातृभाषा और हिंदी में प्रयुक्त होनेवाले कुछ क्रिया-रूपों की सूची उन्हें दें । फिर उन्हें स्वयं, अन्य क्रिया-रूपों की सूची बनाने में सहायता दें । निरंतर के अभ्यास से उनकी क्रिया-प्रयोगों के विषय में जानकारी अपेक्षाकृत बढ़ती जाएगी ।

शिक्षक/शिक्षिका उनसे क्रिया-रूपों के प्रयोग संबंधी अभ्यास करवाते/करवाती जाएं और

और नियमित रूप से अभ्यास-कार्य की जाँच करते/करती जाएं । साथ ही, शुद्ध-प्रयोग के संबंध में सीखनेवालों को दिशा-निर्देश भी दिये जाएं ।

पूर्वकालिक क्रिया के प्रयोग को लेकर बाँगला में, हिंदी से जहाँ अंतर है, उसके बारे में प्रतिभागियों को बताना होगा कि हिंदी में "खाकर" "पढ़कर" "सोकर" जैसे रूप प्रयुक्त होते हैं और उनमें मूल क्रिया के साथ "कर" लगा होता है, जबकि बाँगला में आरंभ में आनेवाली क्रिया दोहरा दी जाती है (सुए-सुए) । कई बार के अभ्यास द्वारा इस कठिनाई को दूर किया जा सकता है ।

क्रियाओं की अर्थगत भिन्नता से उत्पन्न कठिनाई को दूर करने के लिए प्रतिभागियों को मातृभाषा और हिंदी के शब्दों के प्रयोग-संदर्भों को बताना होगा । उदाहरणार्थ, बाँगला और उड़िया भाषा के प्रतिभागियों को बताया जा सकता है कि हिंदी में "पीने" और "खाने" में अंतर किया जाता है, क्योंकि ठोस खाद्य के लिए "खाना" और तरल चीज़ के लिए "पीना" का व्यवहार होता है । जैसे—

सोहन रोटी खाता है ।

गीता दूध पीती है ।

शिक्षक/शिक्षिका ठोस तथा तरल चीज़ों की सूची बनाकर प्रतिभागियों से पूछ सकते/सकती हैं कि किन चीज़ों के साथ "खाना" का व्यवहार होगा और किनके साथ "पीने" का।

क्रिया-प्रयोगों को सिखाने के लिए, सीखनेवालों को दूरदर्शन के कार्यक्रमों को देखने-सुनने के लिए प्रेरित किया जाए । साथ ही, स्तर के अनुरूप, उन्हें हिंदी पत्र-पत्रिकाएं भी पढ़ने के लिए दी जाएं । शिक्षक/शिक्षिका, उनके आधार पर प्रश्न करके, उनके क्रिया-प्रयोगों की जानकारी का स्तर मालूम करें ।

५. मूल्यांकन :-

क्रिया-रूपों को लेकर प्रतिभागियों की समझ किस सीमा तक विकसित हुई और निर्धारित उद्देश्यों को प्राप्त करने में उन्हें कितनी सफलता मिली, इसकी जानकारी के लिए मूल्यांकन की प्रक्रिया से गुज़रना आवश्यक है । प्रतिभागियों को ऐसे निर्देश दिये जाएं कि वे अपनी मातृभाषा के क्रिया-रूपों की सूची बनाएं और उन रूपों के सामने हिंदी क्रिया-रूप लिखें । इसी तरह वाक्य-प्रयोगों को भी समानांतर लिखाया जा सकता है । इस तरह के क्रियाकलाप करवाने के क्रम में दोनों भाषाओं में विद्यमान समान/असमान क्रिया-रूपों को लिखने के लिए कहा जाए । अध्यापक/

अध्यापिका अपने विवेक से इस तरह के अन्य प्रश्न भी दे सकते/सकती हैं । कुल मिलकर मूल्यांकन का लक्ष्य यही है कि प्रतिभागियों को, क्रियारूपों के प्रयोगों को लेकर जानकारी किस सीमा तक हुई, इसका ज्ञान हो सके, और उस दिशा में प्राप्त परिणाम के आधार पर आगे की शिक्षण-प्रणाली निर्धारित की जा सके ।

क्षेत्रीय शिक्षा संस्थान, भुवनेश्वर
हिंदी प्रशिक्षण पैकेज

१. प्रशिक्षण विषय-वस्तु : कारक-चिह्न-शिक्षण :—

अहिंदी/हिंदी भाषी प्रतिभागियों को हिंदी सिखाने के क्रम में कई कठिनाइयों का सामना करना पड़ता है । सही भाषा बोलना और लिखाना, वस्तुतः एक महत्त्वपूर्ण साधना है । भाषा के ये दोनों कौशल, अभिव्यक्ति पक्ष से संबंधित हैं । भावों-विचारों के प्रकाशन के लिये भाषा का ज्ञान आवश्यक है । उल्लेख्य है कि भाषा का ज्ञान, व्याकरण से पुष्ट होता है। व्याकरण के विभिन्न विषयों — कारक, लिंग, वचन, क्रिया आदि का ज्ञान भाषा की जानकारी के लिए आवश्यक है । कारक-चिह्नों के प्रयोग के क्रम में हिंदी सीखनेवालों से कई गलतियाँ हो सकती हैं । उनसे कारक-चिह्नों के प्रयोग में कहाँ-कहाँ गलतियाँ होती हैं या हो सकती हैं, उन जगहों को रेखांकित करना तथा उनसे कैसे मुक्ति पाई जाए, इस पर विचार करना यहाँ अभीष्ट है ।

कारक-प्रयोग के संबंध में कठिनाइयाँ उन्हीं प्रतिभागियों की ही नहीं हैं जो अहिंदी भाषी हैं, समस्या उन सीखनेवालों की भी है जिनकी मातृभाषा हिंदी की कोई बोली है। हमारा दायित्व है कि हम उन्हें शब्द एवं वाक्य-संरचना की जानकारी देते हुए कारक-चिह्नों के प्रयोग से अवगत कराएं ।

२. प्रशिक्षण के उद्‌देश्य :-

कारकों के सही प्रयोग को सिखाने के लिए निम्नलिखित उद्‌देश्य निर्धारित किए जा सकते हैं —

(क) भाषा-प्रयोग में कारक एवं उसकी विभक्तियों के प्रयोग से संबंधित कठिनाइयों की जानकारी करना ।

(ख) उन कठिनाइयों को दूर करने के उपाय सुझाना ।

३. प्रतिभागियों के क्रियाकलाप-

उपर्युक्त उद्‌देश्यों को प्राप्त करने हेतु प्रतिभागियों से कई क्रियाकलाप कराए जा सकते हैं । उदाहरणार्थ —

(क) उन्हें स्वेच्छा से किसी विषय पर बोलने के लिए प्रेरित करना।

(ख) उन्हें किसी निर्धारित विषय पर अपने विचारों को मौखिक एवं लिखित रूप में व्यक्त करने के लिए प्रोत्साहित करना ।

(घ) उनसे प्रश्न पूछते हुए उनके उत्तर को ध्यान से सुनना ।

इस तरह के क्रियाकलापों से प्रतिभागियों के कारक की विभक्तियों के ज्ञान के आकलन का अवसर मिलेगा और इस प्रक्रिया में उनकी संभावित कठिनाइयाँ प्रकाश में आ सकती हैं —

मातृभाषा का प्रभाव

विभिन्न क्षेत्रों से आए प्रतिभागियों के भाषिक संस्कारों की विभिन्नता के कारण कारक-चिह्नों के सही प्रयोग में व्याघात हो सकता है । यथा —

उड़िया और बाँगला में हिंदी के "ने" का समानार्थी चिह्न न पाया जाना । जैसे —

गाय ने सारी घास चर डाली । (हिंदी)

गायटि सबु घास खाइ देइ अच्छि । (उड़िया)

गोरू सब घास खेये फेल्लों । (बाँगला)

इस कारणवश उड़ियाभाषी या बाँगलाभाषी प्रतिभागी, हिंदी वाक्य-विन्यास-क्रम में "ने" का प्रायः लोप कर देते हैं । जैसे —

गाय सारी घास चर डाली । (अशुद्ध प्रयोग)

इसके अतिरिक्त जिनकी मातृभाषा में "ने" का व्यवहार नहीं होता, वे हिंदी में "ने" के प्रयोग के प्रति अतिरिक्त सजगता दिखाते हुए जहाँ उसका प्रयोग नहीं होना चाहिए, वहाँ भी कर सकते हैं । उदाहरणार्थ —

"मैं भोपाल गया था" के स्थान पर "मैंने भोपाल गया था" जैसा प्रयोग कर दिया जाता है जो अशुद्ध है ।

जानकारी के अभाव के कारण

जानकारी के अभाव के कारण भी कारक-चिह्नों के प्रयोग में ग़लतियाँ हो सकती हैं । यथा —

उड़िया में हिंदी के कर्मकारक "को" के बदले "कु" का प्रयोग होता है और बाँगला में "को" की जगह "के" का प्रयोग होता है । यथा —

राम ने रावण को मारा । (हिंदी)

राम रावण क मारिले । (उडिया)

राम रावण के मारलो । (बाँगला)

इस उदाहरणों से स्पष्ट है कि उड़िया या बाँगलाभाषी हिंदी-प्रयोग करते समय "को" के स्थान पर क्रमशः "कु" या "के" का प्रयोग कर सकते हैं । इस तरह, अन्य कारक-चिह्नों के प्रयोग में भी अशुद्धियाँ हो सकती हैं ।

४. क्रियाकलापों को पूरा करने की कार्यप्रणाली :-

प्रतिभागियों के क्रियाकलापों को करवाने के क्रम में जो जानकारियाँ प्राप्त हों, उनका उपयोग हिंदी कारक-चिह्नों के शिक्षण-क्रम में कर सकते हैं । इस संदर्भ में हिंदी सीखनेवालों को, उनकी मातृभाषा और हिंदी के कारक-चिह्नों की समानांतर जानकारी करायी जा सकती है । यथा —

हिंदी और उड़िया एवं बाँगला में कारक - चिह्नों की स्थिति को निम्नलिखित उदाहरणों के द्वारा समझाया जा सकता है —

<u>प्रथम पुरुष</u>

मैंने यह काम किया । (हिंदी)
मूँ एहि काम करलि । (उड़िया)
आमि ऐइ काज कोरेछि । (बाँगला)
मेरे मित्र आ गए हैं । (हिंदी)
मोर बंधु आसि अछन्ति । (उड़िया)
अमार बंधु एसे गेछेने । (बाँगला)
हमारा घर कहाँ है । (हिंदी)
आमो घर कोउटि अच्छि । (उड़िया)
आमादेर घर कोथाए आछे । (बाँगला)

<u>मध्यम पुरुष</u>

तुम्हारी पुस्तक कहाँ है ? (हिंदी)
तोमरो वहि कोउटि अच्छि ? (उड़िया)
तोमार वोई कोथाए आछे ? (बाँगला)

<u>अन्य पुरुष</u>

राम ने रावण को बाण से मारा । (हिंदी)
राम रावण कु बाण द्वारा मारिले । (उड़िया)

राम रावण के बाण दीए (बाणेर द्वारा) मारलो। (बाँगला)

राम को मिठाई दो। (हिंदी)
राम कु मिठाई दिअ। (उड़िया)
राम के मिष्ठी दाओ। (बाँगला)

राम के लिए यह काम कर रहा हूँ। (हिंदी)
राम पाइ मुँ एहि काम करुछि। (उड़िया)
रामेर जन्ने एइ काज कोरछी। (बाँगला)

राम की पुस्तक लाओ। (हिंदी)
रामेर वई आणो। (उड़िया)
रामेर वोइ आनो। (बाँगला)

पेड़ से पत्ता गिर रहा है। (हिंदी)
गछरू पत्र पड़अछि। (उड़िया)
गाछ थेके पाता पोड़छे। (बाँगला)

पहाड़ पर मुनि रहते हैं। (हिंदी)
पहाड़ उपर मुनि रहु अछन्ति। (उड़िया)
पाहाड़े मुनिरा वास करे। (बाँगला)

जंगल में शेर रहता है। (हिंदी)
जंगल रे सिंह रहुअछि। (उड़िया)
जंगले सिंह थाके। (बाँगला)
जंगल में शेर रहते हैं। (हिंदी)
जंगलरे सिंह रहु अछन्ति। (उड़िया)
बने सिंहेर बास। (बाँगला)

हे राम । तुम कहाँ हो । (हिंदी)

हे राम । तुमि कोउटि अछो । (उड़िया)

हे राम । तुमी कोथाय आछो । (बाँगला)

अरे । यह क्या अनर्थ हो गया । (हिंदी)

आहे । एहा कण अनर्थ होइ गला । (उड़िया)

आह । कि अनर्थ होय गेलो । (बाँगला)

यहाँ हिंदी के साथ-साथ उड़िया और बाँगला के कारक-चिह्नों को उल्लिखित किया गया है । उपर्युक्त वाक्यों से स्पष्ट है कि उड़िया एवं बाँगला में कर्त्ताकारक के चिह्न "ने" का व्यवहार नहीं होता, जबकि हिंदी में "ने" का प्रयोग होता है । इन उदाहरणों के द्वारा विद्यार्थियों को समझाया जा सकता है कि "ने" का प्रयोग कर्त्ता के साथ तभी होता है, जब क्रिया सकर्मक और भूतकाल की हो और साथ ही कर्तृवाच्य की हो । इसी तरह, उड़िया और बाँगला, दोनों में हिंदी के कारक-चिह्न का/की (रामका/रामकी) के स्थान पर "एर" (रामेर) का प्रयोग होता है । इस तरह के अन्य कारक-चिह्नों को, ऊपर दिये गए उदाहरणों से स्पष्ट किया जा सकता है । शिक्षक/शिक्षिका इसके अनुकरण पर अन्य वाक्य भी बना सकते हैं और हिंदी कारकों के प्रयोग के संबंध में विद्यार्थियों को जानकारी दे सकते हैं ।

हिंदी सीखनेवाले प्रतिभागियों से, हिंदी के "कर्म" और "संप्रदान" दोनों कारकों के प्रयोग "को" लेकर अशुद्धि हो सकती है क्योंकि दोनों में "को" चिह्न का व्यवहार होता है । इस भ्रम से बचाने के लिए प्रतिभागियों को बताना होगा कि जहाँ क्रिया का प्रभाव कर्म पर पड़ता है, वहाँ "को" चिह्न कर्मकारक का होगा, और जहाँ किसी के लिए कोई क्रिया करने या कोई चीज़ देने की बात हो, तो वहाँ "को" संप्रदान कारक से संबंधित होगा । जैसे —

राम ने रावण <u>को</u> मारा । ("को" चिह्न कर्मकारक का है)

राम <u>को</u> मिठाई दो । ("को" चिह्न संप्रदान कारक का है)

इसी क्रम में उन्हें बताना होगा कि करण और अपादान, दोनों कारकों का विभक्ति चिह्न "से" है । ध्यान देने योग्य है कि करण कारक में विभक्ति चिह्न "से" साधन के लिए आता है, जबकि अपादान में यही चिह्न अलग होने के अर्थ में व्यवहृत होता है। जैसे —

राम ने रावण को बाण <u>से</u> मारा । ("से" चिह्न करण कारक का है क्योंकि बाण साधन का कार्य कर रहा है।)

पेड़ <u>से</u> पत्ता गिरा। ("से" चिह्न अपादान कारक का है, क्योंकि पेड़ से पत्ता अलग हो रहा है।)

विद्यार्थियों से अधिकाधिक अभ्यास करवाने से उनका कारक-प्रयोग ठीक होता जाएगा । शिक्षिक/शिक्षिका, विद्यार्थियों को पाठ्य-पुस्तक के वाक्यों से कारक-चिह्न छाँटने के लिए कह सकते/सकती हैं और फिर विद्यार्थी स्वयं वाक्य-निर्मित करें तथा उनमें प्रयुक्त कारकों को निर्दिष्ट करने का प्रयास करें ।

५. मूल्यांकन :-

प्रतिभागियों ने कारक-चिह्नों का कितना ज्ञान प्राप्त किया, इसे मालूम करने के लिए, उनका मूल्यांकन करना होगा । मूल्यांकन के अंतर्गत प्रतिभागियों को, दुविधा उत्पन्न करने वाले कारकों को उल्लिखित करवाकर, उनसे वाक्य-प्रयोग करवाए जाएं । जैसे, "ने", "को", "से" कारक-चिह्नों को लिया जा सकता है । इसी तरह रिक्तस्थानों की पूर्ति भी उचित कारक-चिह्नों से करवायी जा सकती है । शिक्षक/शिक्षिका इसी तरह की अन्य कार्यप्रविधियों पर विचार कर सकते/सकती हैं । उदाहरण के लिए जिस प्रतिभागी को कारक-चिह्न के प्रयोग का विवेक हो चुका है, वे दूसरे प्रतिभागियों के कार्य का निरीक्षण एवं जाँच कर सकते हैं । इस क्रम में प्रतिभागियों से उनकी मातृभाषा और हिंदी के कारक-चिह्नों को समानांतर लिखने के लिए भी कहा जा सकता है । यदि हिंदी में किसी कारक-चिह्न का समकक्ष, सीखनेवाले की मातृभाषा में न हो तो, हिंदी कारक-चिह्न के सामने "शून्य"(०) उल्लिखित करने के लिए कहा जा सकता है ।

परिशिष्ट

प्रतिभागियों की सूची

१. श्री सुभाष कुमार पांडेय,
हिंदी शिक्षक,
श्री बालकृष्ण विट्ठलनाथ विद्यालय,
२६ पी. के. टैगोर स्ट्रीट, कलकत्ता

२. श्री शिवसहाय सिंह,
हिंदी शिक्षक
श्रीबालकृष्ण विट्ठलनाथ विद्यालय
२६, पी. के. टैगोर स्ट्रीट, कलकत्ता

३. श्री सुरेश पांडेय,
हिंदी शिक्षक
श्री विशुद्धानंद सरस्वती विद्यालय,
१६०-ए, चितरंजन एवेन्यु, कलकत्ता

४. श्री राधारमण सिंह,
हिंदी शिक्षक
श्रीडीडू माहेश्वरी पंचायत विद्यालय,
३७७बी, अपर चितपुर रोड, कलकत्ता

५. श्री मन्नू प्रसाद साव,
हिंदी शिक्षक,
कांकीनारा हिमायुतुल गुर्बा हाईस्कूल,
ज़िला - २४ परगना (उत्तर)

६. श्री विश्वनाथ सिंह,
हिंदी शिक्षक,
कांकीनारा हिमायतुल गुर्बा हाईस्कूल
पो. ऑ. कांकीनारा
ज़िला - २४ परगना (उत्तर)

७. श्री रामजन्म सिंह यादव,
हिंदी शिक्षक
कांकीनारा हिमायतुल गुर्बा हाईस्कूल
पो. ऑ. कांकीनारा,
ज़िला - २४ परगना (उत्तर)

८. श्री हृदय नारायण त्रिपाठी,
हिंदी शिक्षक
जायसवाल विद्यामंदिर (लड़कों के लिए)
१७२-ए विवेकानंद रोड,
कलकत्ता

९. श्री मदन मोहन तिवारी,
हिंदी शिक्षक
श्रीडीडू माहेश्वरी पंचायत विद्यालय
३७७बी, अपर चितपुर रोड,
कलकत्ता

१०. श्री संतोष कुमार मोहंती,
हिंदी शिक्षक
जी. पी. विद्यापीठ
विश्वनाथपुर, पुरी

११. श्री भुवनेश्वर राउत,
हिंदी शिक्षक
एस. एस. सी. जे. बहुमुखी शिक्षा निकेतन,
पो. ऑ. देवगाँ,
द्वारा, गोंडिया,
ज़िला - ढेंकानाल

१२. श्री निरंजन बारिक,
हिंदी शिक्षक
पंगाटिरा हाईस्कूल,
पो. आ. पंगाटिरा,
ज़िला - ढेंकानाल

१३. श्री मोहम्मद एरकान,
हिंदी शिक्षक
आर. एन. साहू हाईस्कूल,
ताराकोट, जाजपुर

१४. श्री लक्ष्मीकांत नायक,
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बी. सी. हाईस्कूल
पो. तेंटेई, अनंतपुर,
बालेश्वर

संसाधक व्यक्तियों की सूची

बाह्य संसाधक व्यक्ति

१. डॉ. बिक्रम कुमार दास,
प्रोफ़ेसर (अँग्रेज़ी)
३५, सत्यनगर,
भुवनेश्वर

२. श्री विश्ववीर विद्यार्थी,
पूर्व प्राचार्य,
६९८, नयापल्ली,
भुवनेश्वर

३. डॉ. शंकर लाल पुरोहित,
रीडर, हिंदी विभाग,
बी. जे. बी. महाविद्यालय,
भुवनेश्वर

४. डॉ. सुव्रत लाहिड़ी,
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प्रेसीडेंसी कॉलेज,
कलकत्ता

५. डॉ. विमलेश्वर द्विवेदी,
वरिष्ठ हिंदी प्रवक्ता, हिंदी विभाग
उमेशचंद्र कॉलेज,
कलकत्ता

६. डॉ. सुधांशु कुमार नायक,
रीडर, हिंदी विभाग
रमादेवी महिला महाविद्यालय,
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१. डॉ. विजय कुमार सुनवानी,
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२. डॉ. सत्यपाल आनंद,
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क्षेत्रीय शिक्षा संस्थान, भुवनेश्वर

३. डॉ. सुशील कुमार गोयल,
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क्षेत्रीय शिक्षा संस्थान, भुवनेश्वर

४. डॉ. अंबादत्त तिवारी,
रीडर (शिक्षा शास्त्र)
क्षेत्रीय शिक्षा संस्थान, भुवनेश्वर

५. डॉ. कीर्तिचंद पंडा,
पी.जी.टी. (हिंदी)
डी.एम.स्कूल, भुवनेश्वर

६. डॉ. अनूप कुमार,
वरिष्ठ हिंदी प्रवक्ता
एवं
कार्यक्रम समन्वयक,
क्षेत्रीय शिक्षा संस्थान,
भुवनेश्वर

क्षेत्रीय शिक्षा संस्थान, भुवनेश्वर

पी.ए.सी.कार्यक्रम सं.१७.२३ : "माध्यमिक स्तर पर हिंदी-शिक्षण हेतु अत्यावश्यक व्यक्तियों के लिए प्रशिक्षण पैकेज का विकास और परीक्षण "

मॉड्यूलों के कक्षा में परीक्षण हेतु दिशा-निर्देश

माध्यमिक स्तर पर हिंदी-शिक्षण हेतु व्यक्तियों के लिए प्रशिक्षण पैकेज का विकास, इस संस्थान में आयोजित एक कार्यशाला में हुआ था जो दिनांक ८.९.९७ से १२.९.९७ तक हुई थी । उसमें हिंदी-शिक्षण की विभिन्न कठिनाइयों को लेकर कई मॉड्यूल तैयार किए गए थे । हिंदी-शिक्षण में ये मॉड्यूल कितने उपयोगी हैं, इसकी पहचान करने के लिए उनका कक्षा के दौरान परीक्षण (ट्राई आउट) करना अपेक्षित है । मॉड्यूलों के कक्षा में परीक्षण हेतु दिशा-निर्देश यहाँ दिए जा रहे हैं —

१. परीक्षण-कार्य के पूर्व शिक्षक/शिक्षिका संबंधित मॉड्यूल को अच्छी तरह से पढ़ेंगे/पढ़ेंगी । तात्पर्य यह है कि मॉड्यूल के विभिन्न पक्षों को देखेंगे/देखेंगी और उसमें विद्यमान तारतम्य को समझकर, प्रशिक्षण विषय-वस्तु को पढ़ाने की शुरूआत करेंगे/करेंगी ।

२. पर्यवेक्षक भी संबंधित मॉड्यूल को, कक्षा में शिक्षण-कार्य से पूर्व, अच्छी तरह से पढ़ेंगे । कक्षा में शिक्षण-कार्य के दौरान वे गहन पर्यवेक्षण करते हुए "पर्यवेक्षण तालिका" भरेंगे ।

३. शिक्षक शिक्षिका को यह बात ध्यान में रखनी है कि मॉड्यूल के विभिन्न बिंदुओं को इस तरह से पढ़ाना है कि उसके (मॉड्यूल के) निर्धारित उद्देश्यों की प्राप्ति हो सके। कारण यह कि उपलब्धि की वास्तविक परख उद्देश्य-प्राप्ति की स्थिति पर निर्भर करती है ।

४. शिक्षक शिक्षिका इस बात का बराबर ध्यान रखें कि मॉड्यूल के आधार पर जो पढ़ाया जाए , वह विद्यार्थियों को केंद्र में रखकर किया जाए । कारण यह कि शिक्षा-व्यवस्था के केंद्र में सीखनेवाले ही होते हैं । साथ ही, ज़रूरी है कि पूरे शिक्षण-कार्य में उनको सीखने के लिए प्रेरित किया जाए ।

५. शिक्षक शिक्षिका प्रशिक्षण विषय-वस्तु को पढ़ाने के क्रम में, मॉड्यूल के अनुरूप, विद्यार्थियों का मूल्यांकन भी कर लें जिससे विदित हो सके कि विद्यार्थियों ने मॉड्यूल की प्रशिक्षण विषय-वस्तु को किस स्तर तक ग्रहण किया और शिक्षक/शिक्षिका को सिखाने के कार्य में किस सीमा तक सफलता मिली ।

६. मॉड्यूल के आधार पर शिक्षक/शिक्षिका कक्षा में पढ़ाएंगे/पढ़ाएंगी और कक्षा की समाप्ति के तुरंत बाद "शिक्षक/शिक्षिका - स्वयं-मूल्यांकन-तालिका" भरेंगे/भरेंगी ।

७. परीक्षण-कार्य के संदर्भ में "पर्यवेक्षण तालिका" और "शिक्षक/शिक्षिका-स्वयं मूल्यांकन-तालिका" की विभिन्न प्रतियाँ, पर्यवेक्षक और शिक्षक/शिक्षिका को उपयोग हेतु पहले ही दे दी जाएंगी ।

८. प्रत्येक मॉड्यूल के लिए अलग-अलग तालिकाएं भरी जाएंगी ।

९. परीक्षण-कार्य की समाप्ति पर प्रत्येक विद्यालय के पर्यवेक्षक और शिक्षक/शिक्षिका, अपनी-अपनी तालिकाएं भर कर एक साथ रखकर अधोहस्ताक्षरी को ३० जनवरी १९९८ तक "पंजीकृत डाक" (रजिस्टर्ड पत्र) से अवश्य भेज दें जिससे उन तालिकाओं परिप्रेक्ष्य में विभिन्न मॉड्यूलों में, यदि आवश्यक हुआ तो, संशोधन और परिवर्द्धन किया जा सके और प्रशिक्षण पैकेज का प्रतिवेदन (रिपोर्ट) समय-सीमा में तैयार किया जा सके ।

अनूप कुमार
पी.ए.सी. कार्यक्रम स. १७.२३
कार्यक्रम समन्वयक
क्षेत्रीय शिक्षा संस्थान
भुवनेश्वर - ७५१००७

क्षेत्रीय शिक्षा संस्थान, भुवनेश्वर

पी.ए.सी.कार्यक्रम सं.१७.२३ : "माध्यमिक स्तर पर हिंदी-शिक्षण हेतु अत्यावश्यक व्यक्तियों के लिए प्रशिक्षण पैकेज का विकास और परीक्षण"

शिक्षक/शिक्षिका-स्वयं-मूल्यांकन-तालिका

(शिक्षक/शिक्षिका अपनी कक्षा की समाप्ति पर तुरंत भरे)

मॉड्यूल सं.　　कक्षा　　बालकों की संख्या　　समय-अवधि

बालिकाओं की संख्या　　पीरिएड

निर्देश :- जहाँ क,ख,ग,घ,ङ के रूप में श्रेणियाँ दी गयी हैं, शिक्षण के दौरान जिसे ठीक समझें, उस पर सही (✓) का चिह्न लगाइएं ।

१. मैंने अध्यापन-कार्य मॉड्यूल के अनुरूप किस सीमा तक किया ?	क	ख	ग	घ	ङ.
२. मेरे अध्यापन-कार्य में कितनी स्पष्टता रही ?	क	ख	ग	घ	ङ.
३. विद्यार्थियों की कठिनाइयाँ किस स्तर तक दूर हुईं ?	क	ख	ग	घ	ङ.
४. शिक्षण-कार्य के दौरान, विद्यार्थी कितने एकाग्रचित्त थे ?	क	ख	ग	घ	ङ.

५. आपकी दृष्टि में विद्यार्थियों ने किस कार्य-प्रविधि को अधिक पंसद किया ?

१. श्यामपट - कार्य

२. समूह - कार्य

३. व्याख्यान

४. यदि अन्य कोई हो, तो

६. निर्धारित उद्देश्य की प्राप्ति किस स्तर तक हुई ?	क	ख	ग	घ	ङ.

७. संबधित विषय के बारे में विद्यार्थियों का ज्ञान किस स्तर तक बढ़ा ?	क	ख	ग	घ	ड.
८. मॉड्यूल की भाषा, विद्यार्थियों के स्तर के कितने अनुकूल लगी ?	क	ख	ग	घ	ड.
९. मॉड्यूल के अनुसार पढ़ाने से आप कितने संतुष्ट हैं ?	क	ख	ग	घ	ड.

१०. मेरी दृष्टि में मॉड्यूल को बेहतर बनाने के उपाय ये हैं :-

विद्यालय : शिक्षक के हस्ताक्षर

स्थान : नाम

दिनांक : पता

क. ख़राब ख. साधारण ग. औसत घ. अच्छा ड. बहुत अच्छा

क्षेत्रीय शिक्षा संस्थान, भुवनेश्वर

पी.ए.सी.कार्यक्रम सं.१७.२३ : "माध्यमिक स्तर पर हिंदी-शिक्षण हेतु अत्यावश्यक व्यक्तियों के लिए प्रशिक्षण पैकेज का विकास और परीक्षण"

पर्यवेक्षण-तालिका

(कक्षा के दौरान, पर्यवेक्षकों द्वारा भरी जारी है)

मॉड्यूल सं. कक्षा बालकों की संख्या समय-अवधि

बालिकाओं की संख्या पीरियड

निर्देश :- जहाँ क, ख, ग, घ, ड. के रूप में श्रेणियाँ दी गयी हैं, पर्यवेक्षण के दौरान जिसे ठीक समझें, उस पर सही (✓) का चिह्न लगाएं ।

१. शिक्षक/शिक्षिका ने मॉड्यूल के विषय को कितने प्रभावी ढंग से पढ़ाया ?	क	ख	ग	घ	ड.
२. शिक्षक/शिक्षिका ने विद्यार्थियों की कठिनाइयों को किस स्तर तक दूर किया ?	क	ख	ग	घ	ड.
३. मॉड्यूल में जो कार्य-प्रविधि बतायी गई है, उसका अनुपालन शिक्षक/शिक्षिका ने किस सीमा तक किया ?	क	ख	ग	घ	ड.
४. कक्षा में विद्यार्थियों ने किस स्तर तक रुचि दिखाई ?	क	ख	ग	घ	ड.
५. मॉड्यूल की भाषा, विद्यार्थियों के स्तर के कितने अनुकूल थी ?	क	ख	ग	घ	ड.
६. क्या शिक्षक/शिक्षिका ने विद्यार्थियों को ध्यान में रखकर अध्यापन किया ?	क	ख	ग	घ	ड.

७. पढ़ाते समय शिक्षक/शिक्षिका मॉड्यूल से यदि विचलित हुए, तो कहाँ हुए ?

८. कक्षा में किस कार्य-प्रविधि पर अधिक
 बल दिया गया ?

१. श्यामपट-कार्य

२. समूह-कार्य

३. व्याख्यान

४. यदि अन्य कोई हो, तो

९. मॉड्यूल कितना प्रभावी था ?

१०. मॉड्यूल में और क्या सुधार किए
 जा सकते हैं ?

टिप्पणी :-

विद्यालय : पर्यवेक्षक के हस्ताक्षर

स्थान : नाम

दिनांक : पता

क. ख़राब ख. साधारण ग. औसत घ. अच्छा ङ. बहुत अच्छा

विद्यालय - सूची

(जहाँ मॉड्यूलों का परीक्षण (ट्राई आउट) किया गया ।)

१. श्री विशुद्धानंद सरस्वती विद्यालय,
१६०-ए चितरंजन एवेन्यू
कलकत्ता - ७००००३

२. श्री बालकृष्ण विट्ठलनाथ विद्यालय,
२६, पी. के. टैगोर स्ट्रीट,
कलकत्ता - ७००००६

३. चंद्रशेखर जीऊ बहुमुखी शिक्षा निकेतन
पो. ऑ. देवगाँ
द्वारा, गोंडिया
ढेंकानाल - ७५९०१६

proaching stupor (Henderson and Moore[7]) In air-corps personnel, after long combat flying, the more typical symptoms were anxiety, frequently with accompanying dejection and depression, phobias toward combat missions, irritability, and startle reactions (Levy[11]) In addition, where the stress was cumulative, symptoms often differed from those brought on by a sudden and particularly intense combat situation Despite such variations, however, there was surprising uniformity in the general clinical symptoms

A good picture of preliminary symptom development is furnished in a report made by a commission of civilian psychiatrists who were sent to the European Theater of Operations to study combat psychiatric casualties.

"There is almost unanimous agreement that the first symptoms of the failure to maintain psychological equilibrium are increasing irritability and disturbances of sleep

"The irritability is manifested externally by snappishness, over-reaction to minor irritations, angry reactions to innocuous questions or incidents, flare-ups with profanity and even tears at relatively slight frustrations The degree of these reactions may vary from angry looks or a few sharp words to acts of violence

"Subjectively, the state of irritation is perceived by the soldier as an unpleasant 'hypersensitiveness' and he is made doubly uncomfortable by a concomitant awareness of his diminishing self-control One patient put this very vividly by saying—'The first thing that brought home to me the fact that I was slipping was this incident A fellow next to me took some cellophane off a piece of hard candy and crumpled it up, and that crackling noise sounded like a forest fire. It made me so mad I wanted to hit him Then I was ashamed of being so jumpy.'

"In association with this 'hypersensitiveness' to minor external stimuli, the 'startle reaction' becomes manifest (increasingly so as time goes on) This is a sudden leaping, jumping, cringing, jerking or other form of involuntary self-protective motor response to sudden, not necessarily very loud noises, and sometimes also to sudden movement or sudden light

"The disturbances of sleep, which almost always accompany the symptom of increased irritability, consist mainly in the frustrating experience of not being able to fall asleep even upon those occasions when the military situation would permit Soldiers have to snatch their rest when they can They expect a rude and sudden awakening at any time Opportunities for sleep become very precious and an inability to use them very distressing Difficulties were experienced also in staying asleep because of sudden involuntary starting or leaping up, or because of terror dreams, battle dreams and nightmares of other kinds

"This triad of increased 'sensitivity,' irritable reactions and sleep disturbances represents the incipient state of 'combat exhaustion' It usually does not lead to referral * It may exist without much change for days, weeks or even months Sooner or later, often upon the occasion of some incident of particularly traumatic significance to the soldier, the marginal and very unstable equilibrium is upset and the soldier becomes a casualty" (Bartmeier, *et al*[3], pp 374-375)

When these combat casualties reached the physician in the aid station or the psychiatrist at the clearing station, they presented a somewhat typical pattern of complaints and symptoms differing only in terms of the degree of personality decompensation.

"In the majority of cases they followed a stereotyped pattern 'I just can't take it any more', 'I can't stand those shells', 'I just couldn't control myself' They varied little from patient to patient Whether it was the soldier who had experienced his baptism of fire or the older veteran who had lost his comrades, the superficial result was very similar Typically he appeared as a dejected, dirty, weary man His facial expression was one of depression, sometimes of tearfulness Frequently his hands were trembling or jerking Occasionally he would

* Referral to a psychiatrist for treatment

display varying degrees of confusion, perhaps to the extent of being mute or staring into space Very occasionally he might present classically hysterical symptoms"* (Menninger[17], p 143)

Although the following case is a rather severe one, it illustrates the symptom picture in combat exhaustion quite well.

"A 20-year-old platoon Sergeant in the infantry had no anxiety in civilian life, and none in the six major engagements prior to the Battle of Mateur, where he developed acute anxiety in a very confused military situation. His platoon had orders to take a hill and had been told that they would meet with no opposition The reverse proved to be the case, and most of the men were wiped out by enemy machine gun fire The patient and a friend wandered about trying to get back to their own lines, when they were caught in the fire of their own artillery They finally made their way to a foxhole, where they found a dead German and a dead American soldier, the latter having been a member of their company The patient's friend threw the bodies out, and got into the foxhole. Shells were falling all about them and there was no room in the foxhole for the patient He then developed intense anxiety and did not know what to do; finally he lay prone on the ground and flung the dead bodies of the two soldiers over him for protection He lay there for a long time, trembling and terror-stricken, until finally an artillery shell exploded very close by and blew the two bodies off the patient, ripping off his shirt at the same time. The two dead soldiers had actually saved his life His mind at that point went blank He wandered about, and was picked up by some men from his company, who brought him back to the bivouac area, from where he was returned to the rear When he entered one of the forward hospitals he had acute anxiety, persistent tremor, great restlessness, loss of appetite, and insomnia with battle dreams After a few days of rest these symptoms improved considerably. The acute anxiety and tremor disappeared, and he was sent back to our hospital On admission he complained of restlessness, lack of appetite and a shaky feeling in his body. He had only very fine tremors of the hands There were terrible dreams, in which he relived his battle experience, and also nightmares, in which he saw himself being attacked by gorillas After pentothal therapy all anxiety disappeared, as did the battle dreams and he was shortly sent back to non-combatant duty" (Grinker and Spiegel[1], pp 18-19)

We have seen the symptom picture in mild and fairly severe combat exhaustion cases Now let us turn to a very severe case in which there is extreme personality disorganization It may be noted that cases of this type are often difficult to distinguish from typical psychotic reactions based upon long-term decompensatory trends within the personality. During the early part of the war many such cases were mistakenly diagnosed as schizophrenics.

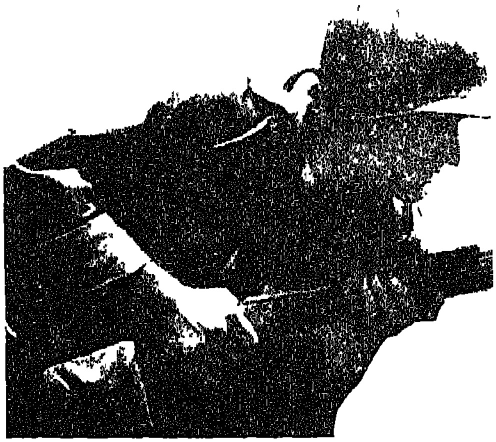
"A 32-year-old infantryman had taken part in the severe fighting in Northern Tunisia Nothing was known of his past history beyond the fact that his company had been subjected to heavy mortar fire and dive bombing while attempting to take a height strongly defended by the enemy When brought into the hospital, he was unable to speak, and presented the typical picture of severe terror He had coarse, persistent tremors of the hands and lips and started violently when any part of his body was touched At times he seemed about to speak but nothing came of it but inaudible whispers He made no effort to get out of bed or to help himself in any way but lay in a flexed posture with his body curled up like an intra-uterine fetus . At the end of two weeks the clinical picture had undergone considerable change The patient was now out of bed, but walked with a peculiar simian gait His knees were bent and his shoulders stooped, his arms hung lifelessly at his side to below the knees, and his head and neck jutted forward at a peculiar angle His facial expression

* A hysterical symptom is an ailment such as blindness or paralysis for which there is no organic basis (See Chapter 6)

was one of anxious, puzzled apprehension He squinted and frowned at his attendants as if trying to make out who they were and what he had to fear from them If an attendant made a sudden or unexpected motion, the patient would start back with fear With much stammering, he asked simple questions about who he was, where he was, and what had happened to him He asked these questions over and over again, never receiving satisfaction From time to time, a fatuous smile would cross his face, he would laugh, and, leaping upon his cot, he would jump up and down on the springs and shout 'Dive bombers! Dive bombers!' as if it were a huge joke Apparently an accomplished accordion player in the past, he had his instrument with him and enjoyed playing it He repeatedly played the song 'Maybe,' singing the words to his accompaniment without a trace of his usual stammer When he sang, his whole face lit up in a kind of ecstasy, tears ran out of his eyes, and the apprehension disappeared, only to return as soon as he put away his instrument There was considerable stereotypy, and various bizarre mannerisms reappeared in a regular routine After treatment, this patient made a good recovery " (Grinker and Spiegel[4], pp 5, 6, 7)



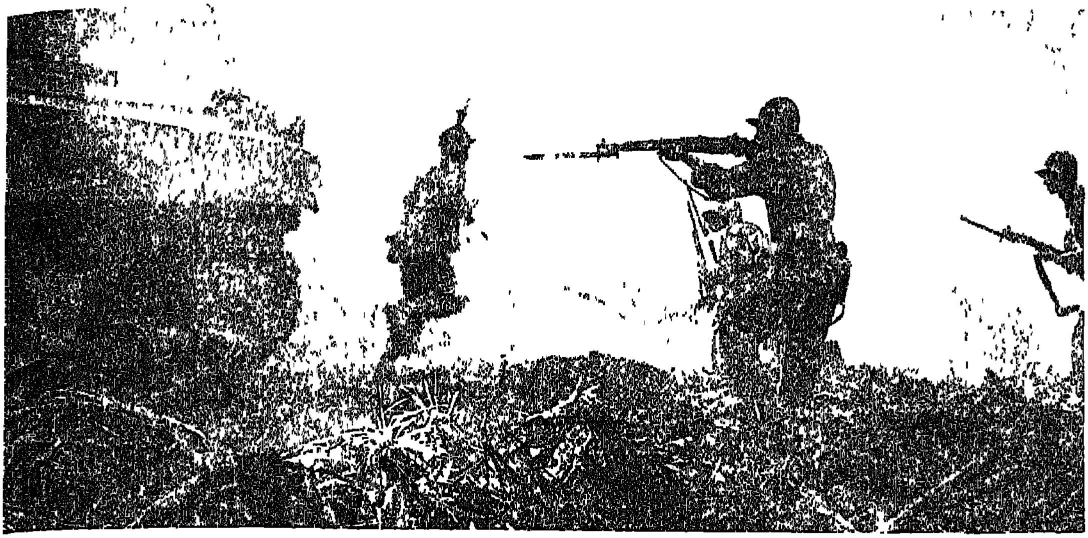
In some cases men evidenced what might be called delayed reactions to combat. They were able to carry through a particular combat assignment and after the combat was over would then develop typical combat-exhaustion symptoms Apparently the ego managed to



hold up temporarily under the acute stress of combat but at too heavy a price in the long run In some cases a soldier whose morale was good during many months of combat might be so exhausted by his combat experiences that a change in his general environmental situation such as being sent home would precipitate a delayed combat reaction.

DYNAMICS

In combat exhaustion we are dealing with varying degrees of ego disorganization or decompensation in the face of situations in which one's ordinary adjustive reactions are relatively useless There is nothing to engender the adequacy and security feelings the individual has known in a relatively safe and dependable civilian world The terrifying situation represents a threat to one's very



Acute and prolonged stresses such as here portrayed led inevitably to severe decompensation in thousands of previously well-integrated and "normal" men. Because so many men were affected, and because of the typical rapidity of both their decompensation under stress and their subsequent recovery after removal from the stress, a careful study of the records of our combat-exhaustion cases will help us to understand the dynamics of civilian traumatic reactions, as well as of the slower-developing, more "typical" neuroses and psychoses. We shall be able to see in clear relief both the predisposing and the precipitating factors that may lead to decompensation and neurotic or psychotic behavior.



existence—a threat which can be neither overcome nor escaped. To meet this catastrophic threat there is an emergency mobilization of the individual's potentials, accompanied by severe and increasing anxiety, as the stress continues and no adequate response pattern can be found.

The hypersensitivity to stimuli which is evidenced in the startle reaction also follows from the continued state of emergency mobilization. With the loss of security and adequacy and the constant fear of danger one must be constantly on guard. Consequently the buzz of a fly or the striking of a match may produce marked overreactions. This hypersensitivity is of course intensified when the stimulus bears a direct association with the original traumatic situation. A patient who has been strafed by attacking planes may be terrified at the distant sound of an approaching plane. Even in our normal lives, any prolonged emotional stress will keep our nerves "on edge" and bring increased irritability.

The dynamic significance of the recurrent nightmares is not fully understood. How and why does the traumatic material become reactivated during sleep, when the individual desperately needs quiet and rest? In some cases the repeated dreams are so terrifying that the individual is even afraid to go to

sleep. Consequently, without some desensitization to the traumatic experience, the symptoms are not likely to abate immediately. Conceivably, of course, such recurrent nightmares may be of adjustive value in that the continual reliving of the battle experience serves to discharge gradually the tension connected with it and to desensitize the patient, thus enabling him eventually to cope with and assimilate the traumatic emotional experience. This may be related dynamically to temporary repression or to amnesia, which enables an individual to avoid a traumatic experience until its emotional intensity has cooled down to the point where he can tolerate the experience without extreme ego disorganization. Whatever the fundamental underlying dynamics, we do know that dreams frequently reflect the interplay of emotional conflicts and stresses in a remarkably direct, unrestrained, and graphic way.

The guilt feelings which many of the men experienced typically arose out of feelings of relief that it was their buddies who were killed instead of themselves, as well as out of the killing of enemy soldiers and the inevitable self-devaluation arising out of inability to continue with their units.

It is interesting to note that wounded soldiers were apt to show less anxiety and other combat-exhaustion symptoms. In general, the more disabling the wound, the less the anxiety. In fact, anxiety states in patients with major wounds were exceptionally rare (McElroy[14]). Apparently the need for developing the anxiety state was relieved by the wound, which enabled the soldier to escape from the anxiety-producing combat situation. It was not unusual for a soldier to admit that he prayed "to be hit" or to have something honorable happen to remove him from battle.

Men who have received physical injuries in combat do, however, often evidence delayed traumatic reactions or a hysterical prolongation of their symptoms when they are approaching full recovery and the necessity of returning to combat. There may be nervousness, insomnia, and other related symptoms, which were nonexistent during the initial period of hospitalization.

In cases where the combat injuries are disabling or result in permanent mutilation, the outcome will depend upon the way the individual reacts to the change in his life situation and reshapes his self-evaluation. These cases present difficult therapeutic problems. Even with the best of therapy, many patients who have lost limbs or eyes or suffered mutilations develop psychiatric complications. According to available statistics, however, it would appear that the great majority of combat casualties made successful civilian readjustments.

So far, we have spoken only of excessive stress as a precipitating cause in combat exhaustion. However we must not overlook the fact that some 90 per cent of the men came through combat without becoming psychiatric casualties, although most of them evidenced severe fear reactions and other symptoms of ego disorganization which were not severe enough to be incapacitating (Menninger[17]). In addition, many men tolerated almost unbelievable stress before they broke, while others became casualties under conditions of relatively slight combat stress. Consequently, other factors also must be examined for their contribution to the total picture, such as possible biological predisposition, degree of personality integration prior to the traumatic combat experiences, and differences in the way different people will evaluate a given stress situation. As Kardiner[9] has pointed out, one person may experience as great a threat from an angry shout as another does from a nearby exploding shell.

Biological predisposing factors. Is it some mysterious constitutional weakness which tips the balance? Evidence on this point is somewhat contradictory. Hastings, Wright, and Glueck[6] report a history of psychoses in 6 per cent of the families of 100 American fliers who had completed a tour of combat duty without psychiatric mishap. Thus a family

history of mental illness is not necessarily disqualifying for military service In general, however, Army investigators report a relatively lower incidence of pathological conditions in the family background of successful soldiers although this cannot be taken as conclusive evidence of the importance of hereditary predispositions (Hirschberg[8]; McNeel and Dancey[15], Sheps[22])

Biological predisposing factors whose importance is more readily assayable include fatigue, lack of sleep, inadequate diet, illnesses, toxic conditions, exposure, sexual frustrations, and other conditions which lower the general level of biological functioning. The continual emotional mobilization under prolonged combat conditions represented a terrific drain upon bodily resources, where these reserves were low to start with, there was less margin to draw on

Psychological predisposing factors. These include a wide range of situations and conditions separation from home, sacrifice of personal freedom, isolation, frustrations of all sorts, domestic difficulties, fear, and the degree of anxiety previously built up One man who had undergone months of combat broke after hearing that his wife had been "stepping out on him" Another man, also a hero who had survived months of combat, broke down after returning from a furlough During his furlough he was married and afterwards he did not want to die because of his wife The death of a buddy may lead to a sudden loss of emotional support which the buddy provided or to a weakening of ego organization due to identification with the buddy or to feelings of guilt for not saving him.

Several other psychological predisposing factors deserve special discussion

1. Unexpectedness of acute stress and immobilization are strong factors in the overwhelming of the ego When the individual knows what to expect, he has a much better chance of coming through with a minimum of ego disorganization This partly explains the effectiveness of innovations in armaments for which the enemy soldiers are not properly prepared Also where the individual has certain definite duties or responsibilities to perform he is less likely to break down Firemen during the blitz in England stood up well under the extreme stress because they knew what to expect and had definite duties to perform which kept them busy (Guttman and Baker[6]) Where men are immobilized and unable to relieve their pent-up tension by activity they break more easily Saul[21], for example, cites the case of

"an energetic young volunteer who enjoyed combat duty When he fought, he 'fought like hell' and when he ran, 'he ran like hell' One day, however, an enemy plane overhead was hit and came hurtling to earth, as it seemed, directly at the patient, who was crouched in a watery foxhole He could neither fight nor run His instinctive reaction was to dig but he was stopped by the water It was at this point, when he felt unable to fight or flee or otherwise *act* as his whole organism was physiologically mobilized to do, that he felt his emotional tension mount to such a degree as to be overwhelming" (p 261)

2. The necessity of killing enemy soldiers is also an important predisposing factor in combat reactions Most of us have strong attitudes against any physically hostile behavior and especially against killing It is psychologically almost impossible for some men to become overtly hostile and to engage in ruthless killing In extreme cases such men are unable even to defend themselves when attacked Men who feel extremely guilty about their belligerency and hostility cannot engage in killing without an automatic fear of retaliation and punishment A good fighter, a machine gunner, one day killed five of the enemy almost simultaneously. "His first reaction was elation—but suddenly he felt that it was wrong to enjoy this and thereupon developed anxiety with some depression, so severe that he was incapacitated" (Saul[21], p. 262) To such a man, further combat may come to mean fulfillment of dreaded retaliation and

punishment Thus anxiety growing out of combat often reflects not only simple fear of physical injury and death but also emotional conflicts, fears, and guilt feelings generated by killing

3. We have seen that with prolonged acute stress and long-continued emotional mobilization there may be a gradual undermining or weakening of the ego and the adjustive capacities Thus fear and anxiety are important as both psychological and biological predisposing conditions. Their importance is frequently intensified by the soldier's conflict between a desire to run away or give up, and his devotion to duty or his fear of what the other men in the outfit would think of such cowardice The following cases, one from the air corps and the other from our fighting men who made the initial assault against the enemy on Guadalcanal, dramatically reveal the cumulative effect of prolonged combat stress.

When the tail section of his plane was knocked off at 20,000 feet, the tail gunner of a B-17 "fell 19,000 feet in the loose tail section before he was able to frantically push his way through the skin of the tail and get his parachute open He then saw the remainder of the plane hit the ground and explode, killing his fellow crewmen He went on five subsequent missions, three of which were extremely harrowing, before he 'broke' " (Hastings *et al*[6], p 42)

The following diary covers the period from August 7, 1942, to September 18, 1942 The excerpts speak eloquently for themselves.

"Aug 7, 1942 Convoy arrived at Guadalcanal Bay at approximately 4 A M. in the morning Ships gave enemy a heavy shelling. At 9 A M we stormed the beach and formed an immediate beachhead, a very successful landing, marched all day in the hot sun, and at night took positions and rested Enemy planes attacked convoy in bay but lost 39 out of 40 planes

"Aug. 8, 1942 Continued march in the hot sun and in afternoon arrived at airport Continued on through the Jap village and made camp for the night. During the night, Jap navy attacked convoy in battle that lasted until early morning Enemy had terrific losses and we lost two ships. This night while on sentry duty, I mistook a horse for a Jap and killed it

"Aug 19, 1942 Enemy cruiser and destroyer came into bay and shelled the beach for about two hours The cruiser left and the destroyer hung around for the entire morning We all kept under shelter for the early afternoon a flying fortress flew over, spotting the ship and bombed it, siting it afire we all jumped and shouted with joy. That night trouble again was feared and we again slept in foxholes

"Aug 21, 1942 The long awaited landing by the enemy was made during the night 1500 troops in all and a few prisoners were taken and the rest were killed Bodies were laying all over beach In afternoon planes again bombed the Island [Here the writing begins to be shaky, and less careful than previously]

"Aug 28, 1942 The company left this morning in higgins Boats to the end of the Island, landed and started through thick Jungle and hills It was hot and we had to cut our way through. In afternoon we contacted the japs our squad was in the assault squad so we moved up the beach to take positions the enemy trapped us with machine gun and rifle fire for about two hours The lead was really flying Two of our men were killed, two were hit by a hand greade and my corporal received a piece of shrampnel in back,—was wounded in arm, out of the squad of eight we had five causitry. We withdrew and were taken back to the Hospital

"Sept 12, 1942 Large jap squadron again bombed Island out of 35 planes sent over our air force knocked down 24 During the raid a large bomb was dropped just sevety yards from my fox hole

"Sept 13, 1942. At on o'clock three drestroyers and one cruiser shelled us contumally all night The ships turned surch lights all up and down the beach, and stopped one my foxhole seveal time I'm feeling pritty nervese and scared, afraid I'll be a nervas reack be for long. slept

in fox hole all night not much sleep This morning a 9:00 we had a nother air raid, the raid consisted of mostly fighter planes I believe we got several, this afternoon we had a nother raid, and our planes went out to met them, met them someplace over Tulagi, new came in that the aircraft carrier wasp sent planes out to intersept the bombers. This eving all hell broke lose Our marines contacted enemy to south of us and keep up constant fire all night through

"Sept 14, 1942 This morning firing still going on my company is scaduted to unload ships went half ways up to dock when enemyfire start on docks, were called back to our pososeion allon beach, company called out again to go after japs, hope were lucker than we were last time [part of this illegible] Went up into hills at 4 00 P M found positions, at 7 00 en 8 sea planes fombed and strifed us, 151942 were strifed biy amfibious planes and bombed the concussion of one through me of balance and down a 52 foot hil I was shaking like a leaf. Lost my bayanut, and ran out of wathr. I nearves and very jumpy, hop I last out until morning I hop severaly machine s guns ore oping up on our left flank there going over our heads

"Sept 16 this moring we going in to take up *new possissons* we march all *moring* and I am very week and nerves, we marched up a hill and ran in to the affaul place y and z company lost so many men I hardly new what I was doing then I'm going nuts.

"Sept. 17. don't remember much of this day

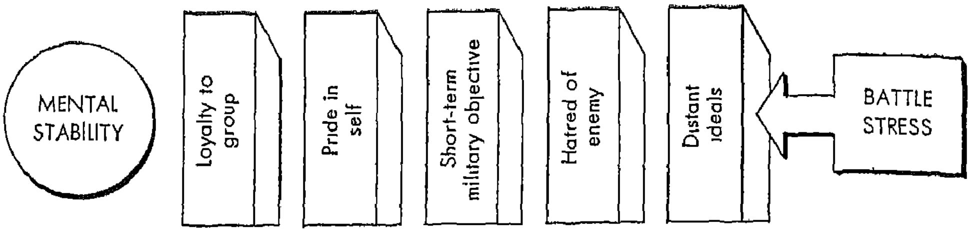
"Sept 18. Today I'm on a ship leaving this awful place, called Green Hell. I'm still nearves and shakey " (Stern[24], pp. 583-586)

4. All prior psychological trauma which have lowered the individual's general resistance to stress or to a particular type of stress are important in determining what kind and degree of stress he can tolerate Faulty parent-child relationships, especially maternal overprotection, make him more vulnerable In an analysis of 200 neuropsychiatric cases occurring under combat conditions in the South Pacific, the most important predisposing factor was found to be an unfortunate home background, resulting in personalities too immature to deal with the problems of war (Henderson and Moore[7])

But even here there are wide individual differences As Saul[21] has pointed out, some excellent fighting men have actually had personal histories of neurotic difficulties and occasionally even overt symptoms prior to combat In a study of 17 highly neurotic soldiers with 60 or more days of combat, Needles[19] found the presence of powerful compensating mechanisms—determination, fear of disobedience, effort to live up to lifelong patterns of conscientiousness, attachment to comrades, and externally directed aggression—which enabled these men to remain in combat despite their neuroses And anxiety neurotics may be so accustomed to anxiety that they can cope with it more or less automatically, whereas men who are feeling severe anxiety for the first time are often terrified by the experience, lose their self-confidence, and go to pieces. Thus in some cases it would appear that a neurosis may actually be beneficial to one's adjustment to combat. In general, however, the more adequate the individual's general personality integration prior to combat, the more stress he can stand before breaking The best soldiers seem to be men recruited from family backgrounds which fostered emotional maturity, acceptance of responsibility, self-reliance, and ready adjustment to new situations (Knight[10])

Sociological predisposing factors. Although many factors included in the preceding section are social as well as psychological in nature, we may particularly emphasize here such factors in Army life as a lack of group solidarity, crowded conditions, poor leadership or lack of confidence in leaders, and a lack of clear-cut, understood, and accepted goals. Where such conditions obtain, they contribute to poor general morale

It has been found particularly important to maintain good group identification and *esprit de corps* in combat troops Where the soldier is unable to identify himself with



In studying the eventual breakdowns of the Army personnel who had been most resistant to personality decompensation, Major Sobel[23] found that such individuals seemed to have been protected by five "defensive layers," surrendered progressively in the face of too-severe stress and threat Distant ideals like "democracy" and "the four freedoms" went first Loyalty to the group was the last to be given up

or take pride in his group, he lacks the feeling of "we-ness" He stands alone, psychologically isolated, and a ready target for psychiatric complications The spirit of the group as a whole seems to be a contagious thing When the group is generally optimistic and confident prior to battle, the individual is also apt to show good morale If the unit has a reputation for efficiency in battle, the individual soldier is challenged to exhibit his maximum efficiency On the other hand, when the unit is demoralized prior to battle, or is defeated in battle or resorts to disordered flight, the individual, too, succumbs more easily to anxiety and panic

Confidence in leaders is also of vital importance Where the individual respects his leaders, has confidence in their judgment and ability, and can accept them as relatively strong father or brother figures, his morale and resistance to stress are bolstered On the other hand, lack of confidence or actual dislike of leaders is highly detrimental to morale and to combat stress tolerance.

Where the individual is fighting only because he is forced to, or to "get the damned war over with," he is not as effective and does not stand stress as well as the soldier who knows what he is fighting for and is convinced of its essential importance Time and again men who feel strongly the rightness of their cause and its vital importance to themselves and their loved ones have evidenced incredible endurance, bravery, and personal sacrifice under combat conditions

The more concretely and realistically the war goals can be integrated into the ego values of the individual in terms of "his stakes" in the war, the greater will be their stabilizing effect on him This sort of integration was especially needed by American troops, because they were faced with a marked disparity between our democratic ideals and the actual nature of modern war

Thus the terrifying nature of the stress situation is actually only one of the precipitating causes of traumatic reactions to combat We must always investigate, too, the wide variety of conditions which may have weakened the individual's ego resistance generally or predisposed him against withstanding a particular type of stress

THERAPY

In most cases, the decompensation brought on by the acute stress of battle conditions was quickly reversed when the men were taken out of combat and given psychiatric treatment It is interesting to note that where decompensation had progressed to the stage of psychosis, the psychotic symptoms were often replaced by neurotic reactions in the course of therapy (Mulinder[18])

Therapy under war conditions was often a matter of expediency, largely because of the lack of psychiatric personnel The general plan of therapy in the European Theater is well summarized by Dr William Menninger, formerly Brigadier General in charge of psychiatric services in the Army

"By their plan in the battalion aid station surgeons were indoctrinated with 'first-aid' psychiatry. It was they who had to decide whether a man should be returned to duty, given a brief respite, or evacuated on to the clearing station It was fully appreciated that many soldiers, if returned to the battalion kitchen area and permitted a night of sound sleep with the help of a mild sedative and some warm food, would be ready in 24 hours to return to combat No record was ever kept of the number of men so handled, but it is known to be a sizable percentage of the men seen at the battalion aid station.

"The seriously upset soldiers were sent 2 to 5 miles farther back to the division clearing station where the division psychiatrist had his headquarters and treatment center This sometimes was in a tent or in a commandeered building such as a school house, factory, or whatever might be available The soldier arrived here from his foxhole within 1 to 3 hours Each one was seen initially by the psychiatrist and interviewed briefly. If he were recognized to be too sick to benefit from brief rest and such psychotherapeutic help as could be given in a short time, he was immediately evacuated farther back. The largest percentage of the soldiers who came to the clearing station remained there for 48 hours These men were given sufficient sedation to insure a good 12 to 24 hours of sleep, only interrupted when awakened for food On the second day they had an opportunity to shave and bathe Approximately 40 per cent could return to combat on the third day. Follow-up studies suggest that many of these men carried on indefinitely Perhaps 25 per cent of this group had recurrences of symptoms and became repeaters.

"The men not salvaged at the clearing station were sent on to what was termed the 'exhaustion center,' usually 10 to 15 miles behind the lines . The average exhaustion center would have from four to seven psychiatrists and a capacity of from 200 to 500 patients

"A soldier patient remained here from 5 to 8 days. He was usually sedated sufficiently to sleep for most of the first 2 days Every case received psychotherapy, and many selected cases were given the special treatment of psychotherapy with the aid of pentothal narcosis In so far as personnel and equipment would permit, the psychiatric casualties were given several days of rest, recreational activity and treatment. In conjunction with the exhaustion center some divisions developed a retraining platoon, under line-officer direction, which provided an additional 2 to 5 days of military activities at a graded tempo to prepare the men for return to combat Of the combat casualties, 20 per cent were returned to combat from these centers

"As has been pointed out, the figure, based on the four active armies in the European Theater, of an average of 60 per cent of combat casualties returned to duty as the result of treatment in the clearing station and exhaustion centers, requires further explanation Whatever per cent were returned to duty does not mean that these men were completely well It was the Medical Corps' chief function to maintain the fighting strength, so that, if a physician considered a man able to perform further duty he was sent back to the line. Psychiatrists had the difficult assignment of returning men to the hell of battle, knowing full well that in many instances it would make their illness worse On the other hand they evacuated 40 per cent to the rear, even though improved, because they were adjudged incapable of further combat duty.

"The men evacuated to hospitals within the Army area or farther back into the communication zone were sent either to a specialized hospital for psychiatric patients or to the psychiatric section of a general hospital [they] salvaged an additional 30 per cent of soldiers for noncombat duty in the zone of communications. Only 10 per cent of the initial group of combat casualties were then left to be evacuated to the United States A significant percentage of these were psychotic patients" (Menninger[17], pp 306, 307, 308)

In the treatment of many of these combat casualties, a short cut was found in which psychotherapy was carried out under the in-

fluence of some sedative such as sodium pentothal or sodium amytal In this hypnotic-like state, the patient was able to relive his combat experience and to recall the various emotionally charged memories which had been totally or partially repressed Under the skillful direction of the psychiatrist, the patient was enabled to re-evaluate and assimilate his emotionally charged experiences into his general personality structure In many cases the patient regained consciousness with his memory clarified and his anxiety or other symptoms greatly reduced

The men evacuated to rear-area hospitals were usually individuals with incipient neurotic or psychotic tendencies which had only been precipitated by the traumatic combat experience Neurotic patients typically evidenced hysterical or hypochondriacal reactions which were unconsciously maintained because of their value in protecting the patient from return to combat The treatment in such cases followed standard civilian methods, except perhaps for the more widespread use of group therapy, which was found of particular value This group therapy varied widely from lectures by psychiatrists on mental-hygiene topics followed by question and answer periods, to group discussions in which each man was encouraged to present his problems In the latter instance, a group discussion and evaluation of the problem was usually encouraged, at the end of which the psychiatrist in charge summarized the problem and offered constructive suggestions toward a solution This technique led to a better understanding by each patient of his own symptoms and also removed the feelings of isolation so common among mental patients Since group psychotherapy enabled the treatment of several patients at the same time, it became of necessity an important treatment method in the Armed Forces.

PROGNOSIS

Traumatic reactions developing under combat conditions either cleared rapidly or developed into one of the familiar neurotic or psychotic patterns.

The administration of therapy as soon as possible after the occurrence of the traumatic reaction and the treatment of the patient within an area not too far removed from the front line were found of crucial importance With immediate, intensive treatment within 15 to 20 miles of the front line, approximately 60 per cent of the psychiatric combat casualties were sent back to duty, and apparently the majority of these men readjusted successfully to combat conditions (Ludwig and Ranson[13]). Such statistics varied, however, with the length of combat exposure of the parent unit Divisions with from one to two months combat could return as many as 80-90 per cent of their psychiatric casualties to combat, whereas in "old" divisions the men seemed to be "burned out" and only some 30-35 per cent could be returned to combat

A prolonged delay between the occurrence of symptoms and therapy tended to a fixation of the decompensatory pattern which made it much more resistant to therapy Similarly, the removal of a patient from the zone of combat to an interior zone seemed to encourage the unconscious maintenance of symptoms in order to prevent a return to combat During the first combat engagements of the American forces in North Africa, psychiatric casualties were transported from the fighting area to base hospitals often some 300 to 500 miles behind the lines Less than 10 per cent of these patients were able to return to duty (Menninger[17]).

In summary then we may emphasize the following points in combat exhaustion

1 A relatively stable personality prior to the traumatic reaction

2 A combat experience of sufficient intensity to act as a reasonable precipitating cause

3 Various psychosomatic symptoms, the triad of irritability, hypersensitivity, and sleep disturbances representing the "incipient" stage of combat exhaustion; and tremors, amnesia, restlessness, inability to concentrate,

anxiety, and more severe regressive manifestations typifying the "full-blown" reaction.

4 Severity of the reaction dependent upon the nature, intensity, and duration of the stress and the personality make-up of the soldier prior to decompensation

5 Good recoverability in a relatively short period of time with even superficial therapy.

"SHOCK" REACTIONS IN CIVILIAN LIFE (TRAUMATIC NEUROSES)

There is a wide variety of acute stress situations in civilian life which may produce transient personality decompensations. The sudden loss of loved ones and terrifying experiences associated with accidents, explosions, fires, and sexual assault are some of the traumatic happenings which often result in such "shock" reactions Over half of the survivors of the disastrous Cocoanut Grove fire in Boston in November 1942, for example, required treatment for severe psychological shock (Adler[1]) For our immediate purposes we may confine ourselves here to a consideration of reactions to terrifying experiences These will serve as models for understanding the general dynamics in all types of transient personality disorders in civilian life and will keep the discussion parallel to that of combat exhaustion.

SYMPTOMS

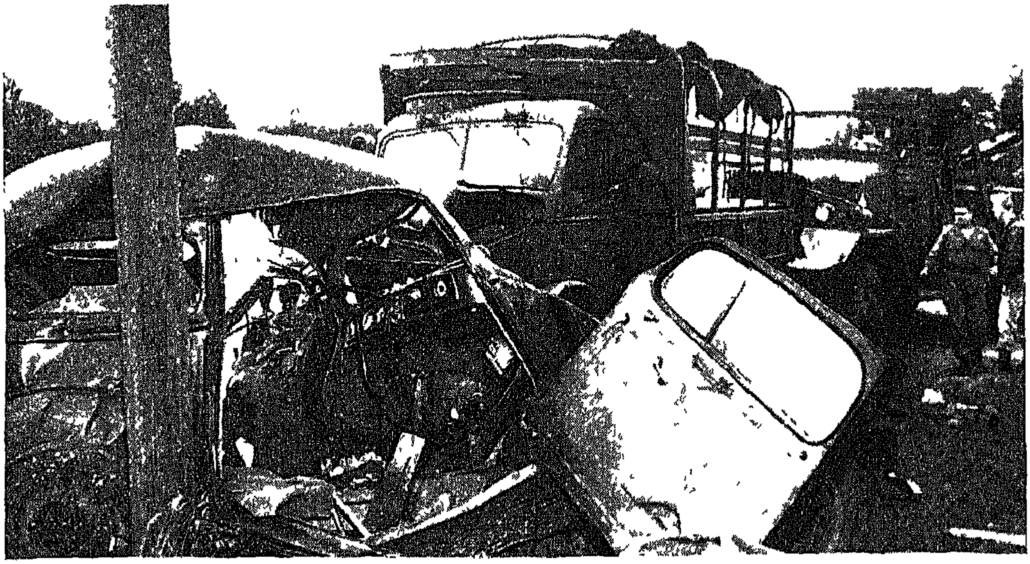
Such "shock" cases may evidence a wide range of symptoms, depending upon the severity and nature of the terrifying experience and the personality make-up of the individual. In general they are similar to the symptoms found in combat exhaustion. Typically they include generalized nervousness, together with considerable anxiety. The patient is tense, jumpy, apprehensive, has difficulty in concentrating and tires easily. Recurrent nightmares which usually re-enact or are closely related to the traumatic experience occur in about half the patients. For example, survivors of the Cocoanut Grove disaster had nightmares of fire and destruction

Perhaps the following case will serve to illustrate the typical symptomatology

A young 26-year-old college graduate apparently dozed at the wheel of his car and awakened at the shrill blast of a whistle to see a locomotive bearing down upon him A split second later the locomotive hit his car, miraculously throwing the patient and his two-year-old son clear but killing his wife in the demolished car On admission to the hospital the patient was tense, anxious, apprehensive, jumped at the slightest sound, and showed marked tremors of the hands During subsequent psychiatric interviews he complained of feelings of unreality, of vague fears and anxiety, and of remorse and guilt over the death of his wife He was unable to sleep except under large sedation and even then he experienced recurrent nightmares in which he relived the accident over and over again. He repeatedly inquired about the safety of his son, and it was difficult to convince him that his son was safe and being taken care of by his parents On several occasions he commented that he felt extremely irritable and "pent up" and that he often felt like "breaking something" With mild psychotherapy the patient made a rapid recovery and was able to return to his home

Not infrequently such traumatic reactions are complicated by more intense guilt feelings and emotional depression and by feelings of hostility, especially in cases of patients who have survived accidents or disasters in which members of their immediate family or friends have been lost This pattern is well brought out in a case reported by Lindemann.

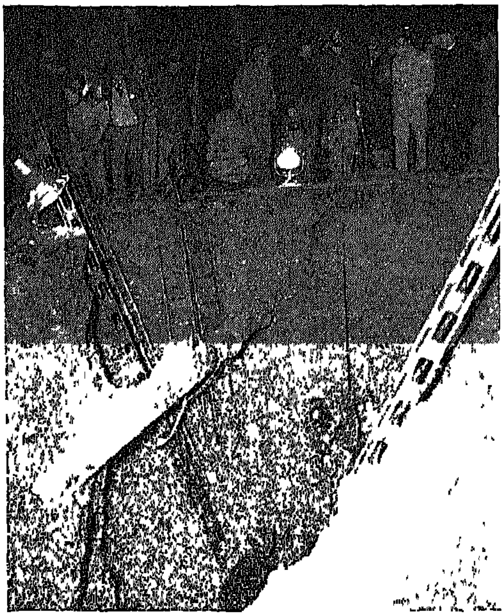
A young man aged 35 had received only minor burns from the Cocoanut Grove fire By the end of the fifth day of hospitalization he was



apparently well on the road to recovery and was informed that his wife had died in the fire He seemed to accept the news quite well and appeared somewhat relieved of his worry about her fate Shortly after his return home, however, he became restless and agitated, and was rehospitalized On admission he was apprehensive and unable to concentrate He would attempt to read only to drop it, he would start conversations and break them off abruptly He repeatedly muttered to himself statements such as, "Nobody can help me When is it going to happen? I am doomed, am I not?" With great effort it was possible to establish enough rapport to carry on interviews He complained about extreme tension, inability to breathe, generalized weakness and exhaustion, and his fanatic fear that something terrible was going to happen. "I'm destined to live in insanity or I must die I know it is God's will I have this awful feeling of guilt" With intense morbid guilt feelings he reviewed incessantly the events of the fire. When he had tried to save his wife, he had fainted and was shoved out by the crowd She was burned while he was saved "I should have saved her or I should have died too." He complained about feelings of incredible hostility and violence and did not know what to do about it The rapport established with him lasted only for brief periods of time, and then he would fall back into his state of intense agitation and muttering He slept poorly even with large sedation However, in the course of four days he became somewhat more composed, had longer periods of contact with the psychiatrist, and seemed to feel that he was making progress in coping with his morbid guilt. On the sixth day of his hospital stay, however, after skillfully distracting the attention of his special nurse, he jumped through a closed window to a violent death. (Adapted from Lindemann[12], p 146)



Both combat exhaustion and civilian neuroses bear out the predictions implicit in the chart and formulation discussed on page 99 that disorders occurring in personalities at the "stable" end of the scale may be expected to show symptoms strongly colored by the stressful situation, whereas disorders occurring in personalities at the "unstable" end will be more a function of the individual's pre-existing problems and misevaluations and may show little relationship to the precipitating stresses Several potentially traumatic situations are depicted on these pages



As in combat cases, many civilian patients show a delay in the development of symptoms Particularly is this true of patients who have received some physical injury. Such reactions are often referred to as post-traumatic neuroses, and a period of weeks or even months may elapse between the time of the injury and the onset of the symptoms In such cases symptoms may include anxiety, headache, backache, weakness, and a hypochondriacal concern over the injured bodily part In some cases the traumatic experience of the injury may serve to precipitate an incipient neurosis, in other cases the later realization of personal mutilation or the subsequent change in the patient's life situation may be the precipitating stress

Symptoms following physical injuries are often further complicated by the psychological effects of damage suits and workmen's compensation laws Legally the development of a traumatic neurosis after injury enables the individual to receive compensation for impairment to his working capacity Although there are no accurate statistics available, it would appear that somewhere between 10 and 25 per cent of the applicants for industrial compensation suffer from post-traumatic neuroses As we shall see in the following chapter, neurotic symptoms are very real, the patient is not malingering.



The assurance of compensation often tends to a prolongation of symptoms, especially in the case of involved legal suits which require months or even years to settle. Consequently, it is advisable, whenever feasible, to have early lump settlements of all claims

As in Army patients, cases with physical injury are unlikely to develop severe traumatic reactions while the injury is incapacitating, but may develop post-traumatic reactions later when they are about to return to an unpleasant job or other disagreeable life situations The following case shows this

The patient was a "53 year old worker who had been run over by a car and, in addition to a concussion, had suffered a fractured leg, which kept him in a plaster cast for 6 months. For a

great many years he had had an inner conflict between his occupation which he found monotonous and his feeling of duty to stay on the job for the sake of financial security. During the time of his illness he was in a somewhat pensive mood but apparently resolved to go back to work as soon as the condition of his leg permitted. Two weeks before returning to work he began to suffer from terrible nightmares and developed definite anxiety states." (Adler[2], p. 238)

DYNAMICS

The dynamics in civilian traumatic reactions seem basically similar to those to combat stress. Here, too, the world which seemed relatively secure and safe suddenly becomes a terrifying place in which one's adjustive abilities are completely inadequate. In the face of this catastrophic threat the individual mobilizes his physiological resources, becomes tense, anxious, hypersensitive, and so on.

Guilt feelings are often particularly intense in civilian casualties, perhaps in part due to the fact that responsibility can frequently be more directly assigned. The effects of such guilt are comparable to those in Army cases.

It perhaps should be pointed out that panic reactions are not uncommon in disasters such as fires which involve large numbers of people. Here the sudden, unexpected nature of the stress, together with a lack of any group organization or preparedness, tends to a complete disorganization or demoralization of the group with each individual striving to save himself. Under such conditions the emotional, panic-stricken behavior of others seems to be almost contagious and the ego may be completely overwhelmed by the fear situation. In these cases the behavior of the individual and of the group may be extremely irrational and nonadaptive and may actually result in the needless loss of life. For example, in the Cocoanut Grove fire the exits were jammed by a rush of panic-stricken people so that many were trampled and those behind them could not get out. And in the well-known Iroquois Theater fire in Chicago, the only deaths that took place were due to panic rather than to burns.

Both precipitating and predisposing conditions in combat situations are apt to differ considerably from those in civilian life, where the individual is not typically separated from home, extremely fatigued, or exposed to prolonged fear and conflict over physical danger. But here, too, the predisposing factors determine which survivors do not develop traumatic reactions and which ones do, and why some recover much more rapidly than others. Such factors as marital difficulties, prior trauma, immaturity, and various other biological, psychological, and sociological conditions may be important as predisposing factors. It may be pointed out, however, that the civilian casualty is usually less prepared psychologically for the traumatic experience because he is not in a situation of acute stress to begin with, as is the soldier.

THERAPY

The treatment of shock reactions in civilian life is little different from that in the Army, except that there is no need to prepare the individual to face the traumatic situation again. Proper rest (induced by sedation if necessary) and reassuring psychotherapy usually lead to the rapid alleviation of symptoms. In mild cases the patient is frequently encouraged to continue his regular activities—for example, after a narrow escape from drowning, to go swimming again. This acts to re-establish the patient's confidence in himself and in his ability to handle his problems, and to prevent the fixation of anxiety in relation to this kind of activity. Obviously, however, this type of therapy must be handled with extreme care to prevent it from resulting in an intensification of the traumatic reaction.

PROGNOSIS

Accurate statistics on the general recovery of civilian shock cases are not available. In general, it would appear that the great major-

ity of cases clear up very rapidly However, in a minority of cases various psychopathological symptoms become fixed after the shock symptoms themselves have cleared up. Where the injury serves to remove the patient from a disagreeable or unbearable life situation or where there are other pronounced secondary gains, as in compensation cases, the patients may be predisposed to delayed recovery (Ruesch and Bowman[20]) The rapidity of recovery can be predicted to some extent in terms of the personality make-up of the patient and the nature of his general life situation In general, the more stable and better integrated the personality and the more favorable the life situation, the quicker the recovery is likely to be.

It may be pointed out again that many other extreme stresses, in addition to terrifying experiences, may produce such transient personality reactions Such emotional experiences as the death of loved ones, divorce, finding one's wife or husband in an intimate relationship with another person, and severe social disgrace may all lead to some measure of ego disorganization Unfortunately, there is little scientific material available concerning most of these other traumatic experiences In the face of such events, however, individuals not infrequently commit suicide or resort to extreme physical violence For example, it is not uncommon to read of a man killing his wife or her lover or both after unexpectedly finding them in a compromising situation In view of the effects of such trauma on subsequent personality reactions, the need for additional study in this general area is clearly indicated.

ACUTE SITUATIONAL MALADJUSTMENT

When even relatively stable, normal individuals are placed in situations for which they are very poorly fitted, various symptoms of maladjustment may develop Men may find army life intolerable because of the regimentation, the separation from loved ones, or other reasons City dwellers may find it impossible to find peace and contentment in isolated areas Most of us have experienced "homesickness" during our first long stay away from home Even unhappy marriages frequently offer good examples of what is meant by situational maladjustment.

SYMPTOMS

Transient personality reactions to such conditions may take the form of anxiety, excessive drinking, chronic fatigue, poor efficiency, low morale, unconventional activities, and related behavior In army life, where many behavioral restraints are reduced or removed, excessive gambling, drinking, and frequenting of prostitutes were common means of reducing anxiety and relieving boredom or feelings of isolation. Many soldiers developed a particularly resentful, embittered attitude which was referred to as a "morbid resentment state" Such soldiers were usually resistant, irritable, fault-finding, and highly resentful about "being shoved around" In civilian life, chronic fatigue, poor efficiency, and excessive drinking are perhaps more typical symptoms of situational maladjustment In both civilian and army life such individuals may become involved in various forms of antisocial behavior.

Below is an illustration of situational maladjustment:

A 32-year-old man and his mother sold their farm in an isolated section of the Northwest and went to live in Los Angeles. Over a period of a year he held occasional odd jobs However, these were unskilled jobs which he considered far beneath his abilities In the meantime the cost of living was rapidly eating up the money they had received from the sale of the farm

As a result of his inability to find a satisfactory job and his mother's continual nagging, he began to wish they had never left the farm He

suggested to his mother that they return to the community from which they had come, but she insisted on remaining in the city, where she could receive specialized medical attention for a kidney ailment Following this, the patient gradually began to show increasing signs of maladjustment He became irritable and moody He gave up trying to find a job For days at a time, he did not shave or attend to personal hygiene but spent his time in his room listening to the radio and reading detective-story magazines. Often he would sleep during the day and spend the night in movie theaters and taverns On several occasions he came home drunk, and in one instance broke up some of the furniture in his room and threatened to beat up his mother when she attempted to remonstrate with him

At her insistence he finally came for psychological help In explaining his difficulties he showed good insight and explained that he felt like a "fish out of water" But he didn't know what to do He couldn't "desert" his mother when she needed him, and yet he felt that if he stayed in the city much longer he would "go nuts"

DYNAMICS

The overall clinical picture is primarily one of a superficial maladjustment to a newly experienced life situation which involves especially trying and difficult circumstances

As in the other types of transient personality reactions, the individual finds himself in a situation where certain things are required of him which he feels do not correspond with what he is able to give Anxiety and self-devaluation result Just as in the case of traumatic reactions, there are wide individual differences—some individuals adjust readily to changes in their life situation whereas others find even relatively minor changes terribly upsetting. Here, again, the reaction of a particular individual depends upon a host of predisposing factors, biological, psychological, and sociological, such as we considered in some detail in our discussion of combat exhaustion. Typically the individual's background is one which has qualified him for radically different conditions from those currently existing Often the factors of emotional immaturity and a general lack of adaptability are of great significance, although in previous situations the individual may have adjusted well.

THERAPY

The simplest and most effective form of therapy, as far as the alleviation of symptoms is concerned, is to remove the individual from the stressful situation and return him to a more personally appropriate environment. However, such a simple therapeutic procedure is often impossible or undesirable for other reasons For example, a child who is having great difficulty in adjusting to his first year of school cannot be taken from the school and allowed to stay home—at least not indefinitely. Such a procedure would only undermine the child's self-confidence and further complicate his adjustment problems. In such cases, and in others where it is impossible or inadvisable to remove the individual from his current situation he must be helped to make a successful readjustment to it He must reorient his old interests or find new ones, develop new and appropriate skills, and find means of making the best of a stressful situation

PROGNOSIS

In general, such reactions clear up very rapidly with a change in environment or appropriate psychotherapy or both However, where they persist for relatively long periods of time without treatment or relief from the situation, there may be serious personality changes which are resistant to all forms of treatment

REFERENCES

The reference list includes not only the sources from which the author has drawn material, but acknowledgments of the permissions granted by authors and publishers to quote directly from their works

1. Adler, Alexandra "Neuropsychiatric Complications in Victims of Boston's Cocoanut Grove Disaster" *Journal of the American Medical Association*, CXXIII(1943), 1098-1101
2. Adler, Alexandra "Two Different Types of Post-traumatic Neuroses" *American Journal of Psychiatry*, CII(1945), 237-240
3. Bartmeier, Kubie, Menninger, Romano, and Whitehorn "Combat Exhaustion" *Journal of Nervous and Mental Diseases*, 104 (1946), 374-375
4. Grinker, Roy R and Spiegel, J P *War Neuroses* Philadelphia The Blakiston Co, 1945
5. Guttman, F and Baker, A A "Neuroses in Firemen" *Journal of Mental Science*, XCI (1945), 454-457
6. Hastings, D W, Wright, D G, and Glueck, B C *Psychiatric Experiences of the Eighth Air Force* New York Josiah Macy Jr Foundation, August 1944
7. Henderson, J L and Moore, M "The Psychoneuroses of War" *New England Journal of Medicine*, CCXXX (1944), 273-278
8. Hirschberg, Cotter "Neurology and Psychiatry Psychoneuroses in Military Personnel" *American Journal of Medical Science*, New Series 208, 1944, 119-132
9. Kardiner, Abram "The Traumatic Neuroses of War" *Psychosomatic Medicine Monographs*, II, III, New York National Research Council, Menasha, Wis, George Banta Publishing Co, 1941
10. Knight, R P "The Treatment of the Psychoneuroses of War." *Bulletin of the Menninger Clinic*, VII(1943), 148-155
11. Levy, N. *Personality Disturbances in Combat Fliers* New York Josiah Macy Jr. Foundation, October 1945
12. Lindemann, Erich "Symptomatology and Management of Acute Grief" *American Journal of Psychiatry*, CI(1944), 141-148
13. Ludwig, Alfred O and Ranson, Stephen W. "A Statistical Followup of Effectiveness of Treatment of Combat-induced Psychiatric Casualties, I Returns to Full Combat Duty" *Military Surgeon*, C(1947), 51-62 "II Evacuations to the Base" *Military Surgeon*, C(1947), 169-175
14. McElroy, R B "Psychoneuroses, Combat-anxiety Type" *American Journal of Psychiatry*, CI(1945), 517-520
15. McNeel, B H and Dancey, T E "Personality of the Successful Soldier" *American Journal of Psychiatry*, CII(1945), 337-342
16. Menninger, William C "Facts and Statistics of Significance for Psychiatry" *Bulletin of the Menninger Clinic*, XII(1948), 1-25
17. Menninger, William C *Psychiatry in a Troubled World* Copyright 1948 by The Macmillan Company and used with their permission
18. Mulinder, E K "Psychotic Battle Casualties" *British Mental Journal*, I(1945), 733
19. Needles, W A "The Successful Neurotic Soldier" *Bulletin of the U S Army Medical Department*, IV(1945), 673-682
20. Ruesch, J and Bowman, K M "Prolonged Post-traumatic Syndromes Following Head Injury" *American Journal of Psychiatry*, CII(1945), 145-163
21. Saul, Leon J "Psychological Factors in Combat Fatigue" *Psychosomatic Medicine*, II (1945), 257-272
22. Sheps, J G "Psychiatric Study of Successful Soldiers" *Journal of the American Medical Association*, CXXVI(1944), 271-273
23. Sobel, Major Raymond, "Anxiety-Depressive Reactions after Prolonged Combat Experience—The Old Sergeant Syndrome," *Bulletin of the U S Army Medical Department, Combat Psychiatry Supplement*, Nov 1949, pp 137-146
24. Stern, Robert L "Diary of a War Neurosis" *Journal of Nervous and Mental Diseases*, 106 (1947), 583-586

CHAPTER SIX

PSYCHONEUROTIC DISORDERS



General Introduction • Specific Reaction Patterns and Dynamics • General Etiology of the Neuroses • Therapy of the Neuroses • Prognosis for the Neuroses

In our discussion of transient personality reactions to special stress we have been dealing for the most part with stable and well-adjusted personalities who have been subjected to excessive stress In psychoneurotic disorders* we will find pathological developmental trends within the personality of the individual which lead to misevaluations of environmental problems, to severe conflicts, and to inefficient personal and social adjustments. Almost invariably these pathological trends show a long developmental history, usually beginning in faulty parent-child relations that have led to immature and distorted attitudes toward the self and toward the surrounding world. Consequently, in the face of stress situations which most of us could handle successfully, these individuals must resort to the use of unhealthy, neurotic defensive patterns. The neurotic response to these stresses may be anything from a phobia to a peptic ulcer. Several distinct psychoneurotic patterns have been delineated which we shall consider individually in the present chapter.

GENERAL INTRODUCTION

Although neurotics are mentally ill, their illness does not involve gross falsification of external reality in the sense of delusions or hallucinations, nor is it likely to cause them to engage in violent behavior with respect either to society or to themselves. Rather they are unhappy, anxious, inefficient individuals who do not require hospitalization, but who are, nevertheless, badly in need of psychiatric assistance.

The actual incidence of psychoneurotic disorders is difficult to determine, but it has been conservatively estimated that at least eight million people in the United States could be classified as psychoneurotic. (*Time*[71]) We have noted already that over one third of all persons who go to doctors with physical complaints are found to be suffering from neurotic

* The terms *psychoneuroses* and *neuroses* may be used interchangeably, likewise, *psychoneurotic* and *neurotic*

or other emotional disorders rather than organic pathology (Menninger[11]). Psychoneurotic disorders are no respecters of age, sex, economic status, or intelligence, and are found among all segments of the general population.

COMMON CHARACTERISTICS OF NEUROTICS

Although neurotics vary greatly in their personality make-up and in their particular symptom patterns, they have in common certain general characteristics in personality development which will help us to understand the nature of neurotic reactions. Among these characteristics are:

1. **Anxiety and fearfulness.** Most neurotics suffer from anxiety and fearfulness, generated by conflicts and feelings of inferiority. Many fear contact with other people in social or business situations, dread venturing forth into the competitive world to earn a living, live in fearful anticipation of a variety of diseases and catastrophes, or have such a generally fearful outlook on life that they are prevented from entering vigorously into the pursuit of worth-while goals.

Reflecting this underlying fear and sense of inferiority, neurotics commonly have difficulties in making up their minds. Often they can make a decision only after a long period of vacillation, and then immediately begin to engage in vain regrets and worries.

2. **Hypersensitivity.** Since the neurotic is anxious and fearful most of the time, he is continually mobilized for defensive action and tends to overreact to both the painful and the pleasurable aspects of experience. He is often completely upset by minor reverses and annoyances which the normal person would take in stride.

Competitive situations are usually extremely traumatic for the neurotic, for failure would further undermine his already insecure status and add to his fear and inferiority feelings. Similarly, his underlying inferiority and fear are apt to be manifested in overreaction to flattery and inability to tolerate criticism.

3. **Heightened self-awareness and egocentricity.** The neurotic is chronically and painfully aware of himself. He is primarily concerned with his own feelings, his own hopes, his own ambitions. He is constantly concerned with his personal status and worth, and all his relationships are fraught with sensitivity concerning people's attitudes toward him and the effect he is having upon others. This lack of social ease is often intensified when the neurotic has to deal with superiors or perform in front of a group.

Since the neurotic typically faces life with such a heavy burden of helplessness and insecurity, he often feels he is fighting for his very life and it is not surprising that in such a fight for existence he should be extremely self-centered (Fischer[19]). Nevertheless he is inclined to maintain rather high goals. He is constantly comparing his own status and accomplishment with those of other people, and his findings, of course, usually add to his self-devaluation.

4. **Emotional immaturity.** The neurotic has failed to progress to mature levels of independence and self-reliance. As a result, he may cling to others for support and reassurance and show an exaggerated need for affection and social approval, or he may attempt to deny his dependency needs and display an exaggerated independence in which he is unable to accept help from anyone.

The lack of a mature core of ego values and the need to cling to others are often manifested in an evaluation of marriage and love as the solution to all problems. Frequently neurotics feel that a strong and vital partner, acting as a center of gravity, will make their life seem vital, secure, and worth while. Needless to say, such hopes are usually destined to disillusionment as a result of the neurotic's own personal insufficiency.

5. **Somatic complaints.** Neurotics are commonly subject to a variety of somatic complaints such as "tiredness," "stuffiness in the head," indigestion, and an assortment of vague aches and pains.

Since medical examinations reveal no organic basis for these complaints, the neurotic is frequently thought to be malingering or putting on an act. Often friends and doctors lose all patience with him and tell him to "buck up" and "snap out of it." But the neurotic is not malingering or faking his symptoms, hence such advice is of little value.

6. **Dissatisfaction and unhappiness.** Because of their fears, worries, conflicts, and general life orientation, neurotics are predisposed to be tense, pessimistic, uneasy, unhappy, and generally dissatisfied with their life situation. They usually have vague feelings that something is missing or that something is wrong, but they are unable to locate the source of their difficulty. A strong pessimism is not surprising in one who never experiences the enhancement of self-esteem, adequacy, and social approval which comes with the satisfaction of obstacles surmounted and goals achieved. By pessimism the neurotic expects nothing and hence is able to avoid some of the hurt and disappointment that might accrue from a more optimistic approach.

In discussing the above typical neurotic feelings and attitudes, it must be emphasized that not all of them are usually found in any given case. In addition, it must be borne in mind that most of us evidence some neurotic symptoms in coping with the stresses of modern civilization and that none of us can escape times of anxiety and unhappiness. However, most of us usually recover our equilibrium and feel fundamentally capable of meeting life's problems. The neurotic commonly denies himself this inner feeling of adequacy, being to a large extent at the mercy of his inner conflicts concerning status, aspiration, morals, and so on. Alexander[3] compares him to "an autocratic country impoverished in initiative, governed by anxiety and coercion."

Thus the neurotic chronically utilizes reactions which the rest of us find necessary only at especially difficult times. They are exaggerated defensive measures, inappropriate to his actual life situation. It is important to remember that they are called forth not by the actual situation, but by the individual's faulty self and environmental evaluations.

CLASSIFICATION OF NEUROTIC REACTIONS

In addition to the preceding characteristics, which are common to neurotics in general, there are numerous types of specific abnormal symptoms which may appear, and which are the basis for the classification of the various specific neurotic reactions. On close analysis it can be seen that *anxiety* is an important component in all types of neurosis and that the various specific neurotic reaction patterns can conveniently be grouped into three classes, depending on the role that the anxiety plays in the total picture.

1. In only one of the neurotic patterns is the anxiety directly expressed and experienced simply as anxiety.
   a) *Anxiety reaction*—diffuse but often severe anxiety which is not specifically referable to any particular situation or threat.
2. Several of the neurotic patterns represent defenses against the anxiety and attempts to cope with the stress situation.
   a) *Asthenic reaction*—feelings of weakness, fatigue, lack of enthusiasm, and a variety of somatic complaints.
   b) *Hypochondriacal reaction*—morbid and obsessive concern about one's state of health in the absence of serious organic disease.
   c) *Conversion reaction*—various physical illness symptoms, such as the paralysis of an arm, or loss of hearing, in the absence of actual underlying organic pathology.
   d) *Dissociative reaction*—amnesia, fugue, somnambulism, and multiple personality.
   e) *Phobic reaction*—various fears which the individual realizes are irrational but which persist nevertheless.
   f) *Obsessive-compulsive reaction*—thoughts

and impulses which the individual recognizes are irrational but which still persist

g) *Neurotic depressive reaction*—extreme and abnormally prolonged dejection and discouragement over the loss of a loved one, following a financial reverse, or because of some other environmental setback

3 Finally, neurotic reactions may be primarily the by-products of the struggle between the emotional conflicts and the anxiety on the one hand and the individual's ego defenses on the other.

a) *Somatization reaction*—here the anxiety is presumably relieved by channeling it through the autonomic nervous system into visceral symptoms and complaints.

SPECIFIC REACTION PATTERNS AND DYNAMICS

In this section we shall examine the specific neurotic reaction patterns and their individual dynamics in more detail We may then proceed to a consideration of general etiological factors and the problems of treatment and prognosis in psychoneurotic disorders as a group

ANXIETY REACTION

This is the most common of the various psychoneurotic disorders. It is characterized primarily by diffuse, "free-floating" anxiety, which does not seem to stem from or be directed toward any particular situation or object. In this respect it differs from other neurotic reactions They, too, involve considerable anxiety, but less of it appears in consciousness, much of it is ameliorated by the development of phobias, compulsions, and other defensive reactions The anxiety neurotic, however, is largely without these defenses, and so is at the mercy of his anxiety

Symptoms Typically there is mild, chronic anxiety, punctuated by transient acute attacks that ma[illegible] a few seconds to an [illegible] nxiety attacks usually come on suddenly, mount to high intensity, then subside They include [illegible] it, tremor of the hands [illegible] breathing, and excessive perspiration.

Accompanying these physiological symptoms are subjective feelings of excitement, apprehension, and impending catastrophe Commonly the patient feels that he is going [illegible] calamity is going [illegible] nough, however, he usually has not the vaguest idea as to what he is going to die from or the nature of the impending calamity But the subjective feelings are none the less acute

As the attack mounts in intensity the patient may tug at his collar or jerk it open, become dizzy or unsteady on his feet, frantically implore those around him to help or summon a doctor After the doctor has arrived and administered therapy, usually in the form of reassurance and a sedative, the patient gradually quiets down In any case, with or without a doctor's help, the attack usually subsides after a few minutes Such attacks vary in frequency from several times a day to once a month or even less often They may occur during the day, or the patient may awaken from a sound sleep with a strong feeling of apprehension which rapidly develops into an attack Between attacks he may appear relatively normal, but closer examination usually reveals tension and persistent mild anxiety.

In some cases there are no acute anxiety attacks but only the constant tension and worry, with persistent mild anxiety These persons are chronically anxious no matter how well things are going Their vague apprehensions and general sensitivity keep them continually upset, uneasy, and discouraged; their continual rumination over possible errors and mistakes further interferes with their intellectual efficiency The lengths to which they will go to find things to worry about is

amazing; as fast as one cause for worry is removed they find another, until relatives and friends lose all patience with them.

Lying in bed, the anxiety neurotic goes over each mistake, real or imagined. When he is not reviewing and regretting the events of the past, he is anticipating all the difficulties that are going to arise in the future. Then, after he has crossed and recrossed most of his past and future bridges and has managed to fall asleep, he frequently has anxiety dreams, such as of being choked, falling off high places, being shot, or being chased by murderers, with the horrible sensation that his legs will move only in a sort of slow-motion fashion and that his pursuers, try as he will, are gradually overtaking him. Such anxiety dreams may awaken him, in which case he generally starts his disconcerting ruminations all over again.

The anxiety neurotic's high level of tension and prolonged state of physiological mobilization predispose him to overrespond to the most minor difficulties. Typically, there are tense and strained postural movements, and he complains of tightness or muscular aches in the general head, neck, and shoulder region; of chronic mild diarrhea or of continual constipation, and of loss of appetite and difficulties in digestion, concentration, and sleep.

Dynamics. Anxiety reactions reflect an individual's insecurity and acute feelings of inadequacy—his basic uncertainty and fear about his ability to achieve his goals, to meet the demands of society, and to cope with the world, which he evaluates as extremely dangerous and threatening. In our present competitive, rapidly changing, insecure, and highly disturbed world we all have many legitimate worries, and it is not surprising that most of us feel uneasy a good deal of the time. But in the case of the anxiety neurotic, there are persistent personality factors that tend to chronic extreme anxiety reactions with or without external provocation. Often, of course, the environment is unconsciously evaluated as dangerous, not in and of itself, but because it stimulates certain "dangerous" desires within the individual and hence evokes anxiety and self-devaluation.

The most common predisposing factor in the background of the anxiety neurotic is a history of emotional insecurity. If one has known chronic emotional insecurity as a child, he may work very hard as an adult but never be able to enjoy his achievements or regard them as "success" because of a constant lurking uneasiness. Regardless of evidence to the contrary he continues to feel inadequate and he is acutely and unrealistically sensitive to the slightest threat or setback. As we have seen, such an evaluation tends to be self-perpetuating, for the individual then sees whatever substantiates his general evaluation. Not infrequently this early insecurity is reinforced by parental overprotection, too high standards, or rejection—all of which act to create feelings of inferiority and self-devaluation. In many cases, too, anxiety and neurotic fears are directly transmitted to children from insecure parents.

Although most neurotic reactions can be traced to developmental failures or distortions in childhood, they may also derive from later life experiences which lead to self-devaluation and a perception of the environment as a dangerous and threatening place. It must be emphasized, however, that an anxiety reaction is only one of the many psychopathological reactions which may develop out of these unfortunate experiences.

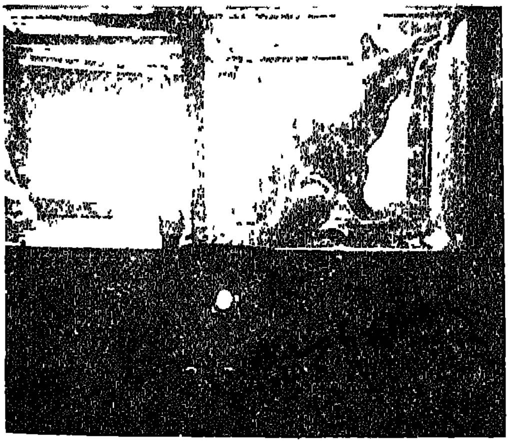
In a personality already psychologically handicapped by immaturity and insecurity, anxiety reactions may be precipitated by any increase in stress in the individual's life situation. Although the acute attacks are superimposed upon a chronic, mild anxiety, they are usually precipitated by an intensification of threat or some specific danger. Yet the relationship between the anxiety attack and the particular threat is seldom seen by the patient. In fact, the anxiety is often the only part of the entire adjustive process that is consciously experienced; both the perception-

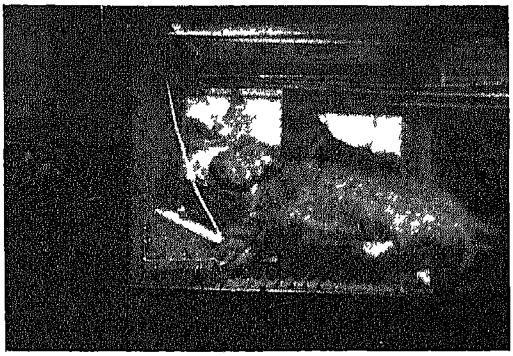
The Experimental Induction of Neuroses in Cats

An unusual series of experiments in animal neuroses has been carried out by Dr Jules Masserman at the University of Chicago In these experiments cats are made neurotic as a reaction to conflict, and their behavior closely observed The basic "traumatic" situation is a conflict between the biological need to obtain food and the flight reaction to fear

The first step in the experiment is to condition a caged cat to respond to a light-and-bell signal by opening a food box to secure food After conditioning, the cat is subjected to a strong (but harmless) blast of air blown into the cage the moment he opens the food box Such air blasts are extremely disturbing to cats even when they are not feeding they recoil and show fright and flight reactions Thus in this case the cat experiences a strong conflict between two important drives He must either resist fear in order to satisfy his hunger or withdraw and remain hungry Under these conditions cats display typical symptoms of anxiety they crouch and tremble, their hair stands on end, their pupils dilate and the nictitating membrane is retracted, their breathing is rapid, shallow, and irregular; their pulse is rapid, their blood pressure is markedly increased They show severe startle reactions and phobic aversions to sudden lights or sounds, to constricted spaces or to restraint, and to any sensory stimulation in the modality associated with the traumatic experience. They may refuse to take any food (From Masserman[40], Behavior and Neuroses)

"*The neurotic animal persistently presses a switch which actuates the feeding signal (pilot light) but makes no attempt to walk around the barrier to secure food in the box*"



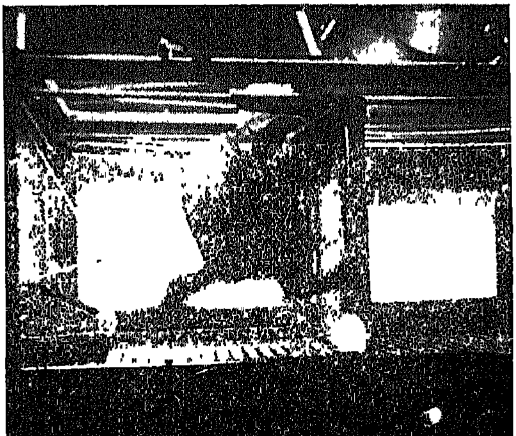


"*A normal cat trained to open the food-box to secure food at a light-and-bell signal The cat readily enters the experimental cage and actively resists removal, even between food-signals*"



"*Continued refusal of food by a neurotic animal which has starved itself for 2 days*"

"*Phobic reaction accompanied by frantic attempts to escape made by a hungry neurotic cat constricted against the open food-box by the movable barrier The pilot lights indicate that visual and auditory food-signals are being given*"



evaluation of the stress and the defensive reactions may operate entirely below the level of consciousness

Among the typical stresses which may precipitate anxiety reactions are

1. *Threats to goals or position* The threat of any kind of any loss that will reflect on their status or moral worth cannot be tolerated by neurotics Those most upset are the overly ambitious, conscientious, dynamic, energetic individuals who have habitually driven themselves at fever pitch toward well-defined, material goals (Coon and Raymond[11]) Usually such patients have a history of early insecurity and goals so high that they inevitably lead to feelings of inferiority and an inordinate fear of failure Even the slightest threat of failure is habitually met by a frantic redoubling of effort In the face of mounting stress their daily living becomes increasingly ill-balanced, with little time for play or recreation, and they develop great anxiety and distressing bodily and mental symptoms.

A conscientious, hard-driving, middle-aged businessman who carried the major burdens of his company on his own shoulders was faced with serious business difficulties He had visions of losing his home, of having his wife (whom he adored and who was extremely proud of his business success) become disillusioned and leave him, and of ending up a dismal, penniless failure. In a desperate effort to surmount his difficulties he began driving himself beyond all reason, often working eighteen to twenty hours a day at the office During this time he experienced heart palpitations on several occasions, and he became extremely fearful that he had developed an incapacitating and perhaps fatal heart ailment Gradually he became more and more worried about his business and himself, developing severe anxiety, indigestion, insomnia, and other neurotic symptoms

Another common precipitating situation in anxiety reactions is the loss of a parent or other person upon whom the individual feels dependent for his safety and security An overly protected son may find himself overwhelmed with anxiety, on the death of his mother, at the terrifying prospect of facing the world alone Similarly, an overly dependent woman may build her entire life around her son or husband, and then find herself in danger of losing him When this happens, acute anxiety may develop Here the anxiety attack usually yields certain marked secondary gains in that the husband or son is likely to have to remain with the "sick" mother, who now needs his aid In one case a son was forced to postpone his marriage for over three years because of his mother's anxiety attacks whenever he attempted to crystallize his marriage plans

2. *Threatened break-through of dangerous desires* Sometimes hostility or immoral sexual desires may be in danger of breaking through the individual's defenses into behavior which would threaten his ethical values or economic or social status This danger is a very real one for those who are so insecure that they feel forced to take a subservient, self-suppressing role, for such subservience inevitably leads to marked feelings of aggressiveness and hostility These feelings must be suppressed and denied at all costs, however, and so we see them finding expression in indirect ways Often they are manifested in fantasies, such as machine-gunning and killing or injuring other people But since these individuals are so abnormally dependent on the approval of others, they are horrified, they cannot afford to admit the existence of these hostile feelings and unattractive thoughts, and so develop considerable anxiety whenever these pent-up impulses appear even in fantasy form

An eighteen-year-old male student developed severe anxiety attacks just before he went out on dates Analysis revealed that he came from a very insecure home in which he was very much attached to an anxious, frustrated, and insecure mother He was not particularly attractive and had considerable difficulty getting dates, particu-

larly with the girls of his choice. The girl he had been recently dating, for example, would not make any arrangements to go out until after 6:00 P.M. of the same day after her chances for a more preferable date seemed remote. This had increased his already strong feelings of inferiority and insecurity, and had led to the development of intense hostility toward the opposite sex which was mostly on an unconscious level.

The symptoms of this repressed hostility, however, came out in obsessive thoughts on the part of the patient of choking the girl to death each time they were out together. As he put it, "When we are alone in the car, I can't get my mind off her nice white throat and what it would be like to choke her to death." At first he put these thoughts out of his mind, but they returned on subsequent nights with increasing persistency. Then, to complicate the matter, he experienced his first acute anxiety attack. It occurred in his car on the way over to pick up his date and lasted only a few minutes, but the patient was panic stricken and thought that he was going to die. After that he experienced several additional attacks, strangely enough under the same conditions.

The relationship of the repressed hostility to the patient's obsessive thoughts and to the development of anxiety is quite obvious in this case. However, it was not at all obvious to him. He was at a complete loss to explain both his obsessive thoughts and the anxiety attacks.

In cases where these neurotically insecure persons have achieved some degree of real success and consequently of security, anxiety attacks may develop if their own behavior becomes such as to jeopardize this security.

A successful business executive developed acute anxiety attacks which occurred about once every two or three months. The patient's wife was eight years older than he, and he was no longer physically attracted to her. He had found himself increasingly interested in younger women and had begun to think how much more enjoyable it would be to have a younger, more companionable wife. During this period, he met a girl with whom he was sure he had fallen in love. It was shortly thereafter that the anxiety attacks began to occur. They were preceded by a period of several days of increased tenseness and anxiety, but the attacks came on suddenly and were very intense.

This man, too, was at a complete loss to explain his attacks. But the explanation was not difficult to find. The patient had had a poverty-stricken and insecure childhood and felt basically inferior, insecure, and threatened by a hard world. These feelings had been intensified when the patient failed college courses in his second year, even though the failure had resulted primarily from excessive outside work. He had been able to achieve some security, however, by marrying an older and very strong woman who had instilled considerable self-confidence and initiative in him. The relationship had proved very fruitful financially and the patient was living in a style which as a youth, "I hadn't dared to imagine in my wildest dreams!" His persistent thoughts about divorcing his wife, on whom he felt dependent for his security and style of life, thus represented a severe threat to the moderately successful adjustment he had been able to achieve. The anxiety attacks followed.

Many anxiety reactions are the result of strong feelings of guilt about immoral sexual behavior or the possibility of it.

A college sophomore, Mary ——, wanted very much to marry a young man she had met in school. However, he insisted on having premarital sex relations to be sure that they would be sexually compatible. This was contrary to her ethical and religious training and she rejected the idea very forcefully. Even so, she considered herself very much in love with him and the thought of giving in to his demands persisted. Eventually she began to experience mild anxiety attacks.

The dynamics here are essentially the same as in the cases cited above. In this case the anxiety was induced by the conflict between guilt at the thought of and desire for immoral behavior and the fear of losing the

man if she continued to refuse Even if she did give in to his demands, she had to face the possibility that he was not sincere but was using this as a method of seduction, or that, even if he were sincere, he might not find her sexually compatible.

Psychoanalytic theory has also emphasized the importance of certain other factors, particularly various forms of interference with normal sexual activities such as *coitus interruptus* and prolonged abstinence in the face of constant stimulation, as in protracted engagements. Sexual disturbances such as these are not uncommon in the background of anxiety reactions, but it would appear that the anxiety comes not from the sexual frustration itself but from the meaning this frustration has for the patient. For example, anxiety may be aroused by the increased possibility of breaking moral conventions in prolonged engagements, or the *coitus interruptus* may represent part of a more general picture of incompleteness and insecurity

3. *An unsatisfactory life situation* If the individual sees no relief or escape from what is to him an unsatisfactory life situation, he may become tense and anxious In the neurotically predisposed person this anxiety is usually alleviated over a period of time by various neurotic patterns such as asthenic reactions, which we shall presently discuss Occasionally, however, the individual may attempt to find compensatory gratifications in sexual indiscretions Here we typically find lonely, insecure, middle-aged married women with a history of being petted and spoiled in childhood, who now are neglected by critical, undemonstrative, and indifferent husbands (Coon and Raymond[11]) Failing to receive the affection which they so urgently need and feeling that their lives are unbearably dull and drab, these women impulsively reach out toward the storybook romance of extramarital affairs, which seem to offer the love and affection they do not get at home

Unfortunately, their clandestine affairs may only complicate their problems by augmenting their insecurities and creating distressing conflicts and intense feelings of guilt As a result, they develop anxiety, depression, weeping spells, and various other psychoneurotic symptoms. Those who have been taught to feel that sex is an evil thing anyway, and who have a fairly strong conscience development are subjected to especially severe self-devaluation and guilt feelings

Anxiety neurotics usually respond well to treatment, although their general anxiety is seldom completely removed Typically, however, the anxiety can be reduced to the point where they make a satisfactory adjustment. In view of the fact that most of us in this troubled world suffer from recurrent anxieties and fears, this is probably all that can be expected for the anxiety neurotic.

ASTHENIC REACTION (NEURASTHENIA)

An asthenic reaction is characterized by chronic mental and physical fatigue and by various aches and pains Exact estimates as to incidence disagree, but these reactions, at least in milder form, are relatively common In general, young adults and frustrated housewives seem to be those most commonly subject to neurasthenia

Symptoms. The patient's primary complaint in asthenic reactions is that of physical and mental fatigue He has difficulty in concentrating, is easily distracted, and lacks the vigor required to carry activities through to successful completion. Even minor tasks seem to require a herculean effort These patients usually spend a great deal of time sleeping in an attempt to counteract their fatigue, yet regardless of the amount of sleep they get, they still feel unrefreshed and awaken tired In fact, the more the patient sleeps, the worse he often seems to feel when he awakens

Typically he feels "just rotten" when he drags himself out of bed in the morning On the rare occasions when he does feel vigorous, he will be completely upset by the smallest emotional setbacks, such as some criticism of

his behavior The fatigue gets worse as the day wears on, although by evening he may feel somewhat better and may go to movies or parties without experiencing anything like his usual degree of exhaustion.

In fact, one of the most significant things about the neurasthenic's fatigue is its selective nature Many of these patients show ample energy and good endurance in playing tennis, golf, or bridge or in doing anything else which really interests them In the face of occupational and other routine activities, however, they are usually monuments of listlessness, lack of enthusiasm, and general "tiredness."

In addition to the chronic fatigue, the asthenic patient usually has a variety of somatic complaints, among which are headaches or stuffiness of the head, indigestion, pain in the small of the back, dizzy spells, hypersensitivity to minor irritations, and other ailments. Sometimes there are more pronounced hypochondriacal trends, but it is usually the fatigue which is the cardinal complaint; other symptoms center around it.

Most of us have occasional headaches or stomach upsets or feelings of fatigue that enable us to avoid some immediate problem that we do not feel quite equal to But our problems and conflicts are usually fairly transitory, and we can discard or vary our defensive reactions rather readily. The neurotic, on the other hand, has long-sustained and systematically repressed conflicts which manifest themselves in relatively consistent illness symptoms

A case which illustrates a somewhat typical neurasthenic reaction to stress is that of a graduate student, Leah ——. This patient complained of a lack of strength and of feeling tired and weak She could hardly drag herself out of bed in the morning even after ten to twelve hours of sleep By mid-afternoon she was completely exhausted and had to take a two- to three-hour nap She was frequently troubled by "pressure in her head" and stated that it felt as though there was "a tight band around her head" For some time she had suspected bladder and kidney trouble. The patient's behavior was a picture of complete lack of enthusiasm and listlessness.

The patient stated that she had always been a rather sickly and sensitive child and attributed her symptoms to her poor general health and too long hours of reading and overwork in connection with her studies. She was in her second year of graduate school but had long since lost any interest she might have had in her major field of study Her studies were tedious and boring and she had a great deal of difficulty in concentrating on them enough to obtain passing grades She was "sick of going to school" When asked why she was continuing in view of the circumstances she admitted quite frankly that her primary interest in life was to get married and rear a family and that she hoped to find an acceptable husband in college She felt that marriage was the solution for all her problems However, despite intensive effort in this direction she had so far been unsuccessful She had occasional dates but no proposals from men she considered acceptable This was due to a variety of factors among which were her poor appearance, her being somewhat older than most of the students, and her membership in a religious sect which frowned on marriage outside the sect and insisted that all children be brought up in this faith

For the past two years after her graduation, the patient had had considerable trouble in getting her parents to continue to finance her education Some two months ago, they had told her definitely that they would not help her beyond her present semester and suggested that she return to their farm and live with them.

This case involves factors that are typically found in asthenic reactions (1) a psychologically predisposed personality in terms of reaction sensitivity to bodily health and fatigue in this case evidenced by the patient's evaluation of herself as a child who had never been very strong, (2) living a life that is disappointing, discouraging, and uninteresting and from which the individual sees no way out

Asthenic reactions are especially common among so-called "nervous housewives," who feel neglected by their husbands and frustrated and cheated by life. Frequently they reveal a history of delicate health in youth and now react to their unhappy domestic situation by developing fatigue, irritability, and depressed spirits. Despite their addiction to "soap operas," romantic novels, and magazines, which may serve as a temporary means of escape and provide some measure of vicarious satisfaction, their situation seems hopeless. It may be too, that neurasthenic reactions are to some extent fostered among women in our culture by our general tendency to regard women as the "weaker" sex, not quite capable of the sustained exertion of the virile male.

The following excerpts are taken from an interview with a middle-aged married woman who felt, and with good reason, that her husband was no longer interested in her. Often he failed to come home for several days at a time, and when he was home, he showed little evidence of interest or affection. Although the patient had completed high school, she had no occupational skills and felt completely dependent upon her husband for support and protection. She was self-pitying in her attitude, prone to relating her symptoms almost endlessly, and was very demanding in her attitude toward the therapist.

Pt. I used to talk rather fluently, but now I'm more nervous than I've ever been and my tongue seems to catch on my teeth so that I don't speak plainly. Everything seems such an effort . . like I had an anchor tied to me or something. I no longer care to play cards or even talk to people any more. Even the simplest things are too much for me.

Dr. Even the simplest things.

Pt. Ah, hm, I mean, the phone is there and I'm lonesome and yet I don't even phone . I don't even talk to my neighbors much any more even though I know that I should be with people and I like people, but I've gotten so that . (long pause) that . . (sigh) . . I feel too bad to even talk or do anything (voice breaks and tears).

I've tried so many things to get well, but it's just awful . . I mean sometimes I can just barely live . I mean just listen to the radio or read, or eat . . I mean just like being in a daze or something. I don't know . . . I just feel so horribly tired and sick.

Two months ago I felt better than I had been. I mean I was able . well I went to several shows and I actually even went to a dance. Often I would begin to get tired, and I was very frightened that I would break down, but I would go on . I mean like some people would go to a battle or to a battlefront (proud tone of voice). But . now . . well I am just so tired and run down that I can't even go to a show . . if I do go . I have to leave in the middle because I am not strong enough. I mean I don't have enough strength to sit through it.

Dr. Two months ago you felt better?

Pt. Well yes . . you see my husband's brother came to visit us . . . and he would talk to me and he had such a way of diverting me and he was very interesting, and you'd be amazed, within a few minutes or a few hours I'd be just different . and he took me to several shows and to the dance. I felt so much better and I had a really good time. So I can see it isn't sleeping or eating. I mean I need someone who'd give me something different to think about someone who'd show you some affection . enough interest in you so that you would improve. But my husband well I just can't understand how he can treat a woman who is ill and trying her best . . . well (tears) . I have just sort of withdrawn . . . he has really made me sick.

Dynamics. Historical attempts to explain the dynamics of asthenic reactions centered around the concept of "nerve weakness," which is the literal meaning of the older term, *neurasthenia*. Beard[5], an early American psychiatrist, who first applied the term to the fatigue syndrome, attributed the condi-

tion to prolonged conflict and overwork, which presumably depleted the nerve cells of essential biochemical elements

This conception gave rise in later years to the Weir Mitchell method of treatment for "[illegible]s exhaustion" which involved a long [illegible] and relaxation for the patient. From time to time many poorly understood neurotic symptoms have been classified as "neurasthenic"—that is, based on actual nerve weakness

It has also been thought in the past that neurasthenia was the outcome of unsolved sexual problems Masturbation, for example, was thought to result in depletion of bodily energy and chronic fatigue Apparently, however, where there are sexual conflicts they can usually be shown to be only the focal point of a much more general maladjustment

The neurasthenic patient himself is likely to explain his fatigue on the basis of various somatic difficulties which he thinks must be there because of the vague aches and pains in his head, chest, abdomen, and other bodily areas Or he may insist that he is run down from prolonged overwork and exertion Such patients, however, rarely if ever reveal a history of overwork, nor is the condition corrected by prolonged rest

At the present time most psychiatrists and psychologists look on neurasthenia as a psychological fatigue reaction, somewhat similar to acute situational maladjustment It is not the fatigue of muscular tiring or of overwork, but the result of the wear and tear of sustained emotional stress which the individual has been unable to cope with successfully The listlessness and loss of enthusiasm are engendered by his complete discouragement.

We all feel tired when we are discouraged and when we are doing something that does not interest us. In the neurasthenic, as a result of prolonged discouragement, normal weariness and fatigue are elaborated into a chronic fatigue reaction Those of us who have worked at jobs in which we were uninterested and bored can well understand the listlessness and tiredness engendered by "putting in time" And since the asthenic does not understand why he feels tired all the time, he is continually searching for bodily ailments which can account for his fatigue and thus indirectly for his failure. His symptoms are essentially a withdrawal reaction; he just "doesn't want to play any more." The chronic fatigue enables him to escape from his problems to some extent by being just too tired and apathetic to do anything about them Likewise, it protects him from self-devaluation by taking away his responsibility for failure his sickness and weakness are to blame, not he.

As in the anxiety neuroses, symptoms can be used aggressively to control the behavior of others The obvious difficulties and complaints of the patient may prevent the husband from obtaining a contemplated divorce, may force additional attention and time from him such as any sick person would merit, and may control his social relations with others Thus there are important secondary gains, and the neurasthenic individual can usually establish a rather regressive, dependent, parent-child sort of relationship with other family members and friends

All this is developed unconsciously, of course The asthenic often gets credit for putting up a noble battle against heavy odds In general, however, asthenics eventually wear out the patience of their family and friends because of their essentially negative personalities Their listlessness, morbid outlook, self-centered attitudes, and continual complaining are not conducive to the maintenance of happy social relationships

As we have seen, any parent-child relationship which prevents mature, realistic, and independent development and leads to the acceptance of overly high goals and aspirations will help to predispose one toward psychopathological reactions to even ordinary stresses We do not have any well-delineated etiological pattern to tell us why some persons develop neurasthenic reactions to stress,

whereas others in the face of similar adjustment problems become hypochondriacs, hysterics, and so on. In general, however, it seems that parental example in fatigue, parental overconcern and solicitousness at the slightest sign of overexertion or illness, and similar parent-child relations may tend to sensitize the child to feelings of fatigue. Especially when such feelings lead to avoidance of unpleasant duties they are likely to emerge in later life in the face of acutely unpleasant and prolonged difficulties.

Treatment. It is well to bear in mind that that fatigue in asthenic patients may actually come to involve organic pathology even though it originates in neurotic reactions. Occasionally the fatigue seems to result from the prolonged overmobilization of bodily resources. The insecure, anxious person lives and works in a perpetual state of emergency and as a result may eventually suffer from a very real depletion of bodily reserves and actual bodily fatigue.

Asthenic reactions are frequently very pernicious because it may not be possible to relieve the unsatisfactory life situation, and it is difficult for the patient to accept the fact that his difficulties are psychological and not somatic. For to face this fact, of course, would be to expose himself to the emotional conflicts from which the symptoms have been protecting him. In addition, he usually makes excessive demands on the time and patience of his therapists. As Weiss and English[74] point out, the neurasthenic

> "presents himself and his story in such a way as to put the whole responsibility for his health, happiness, and success on the physician without himself wanting to participate in any way. He seems to say, 'There's my story, doctor' (after taking plenty of time to tell it in detail). 'Now you pat me and rub me and feed me medicine and take my pains away and give me a good appetite and an easy bowel movement and a good night's sleep, and give me inspiration and happiness and tell me how to be successful, and while you are about it, get my mother-in-law out of the house and I'll pay you when I get a job.'" (p. 552)

Treatment involves, essentially, helping the patient to gain insight into his reactions, and the purpose they are serving, so that he can re-evaluate his problems, goals, and adjustive techniques and gain enough insight and courage to get back into the "battle of life."

HYPOCHONDRIACAL REACTION

Hypochondriasis is a neurotic reaction characterized by the individual's obsessive concern about his state of health or the condition of his bodily organs. This syndrome is particularly common in the forties and fifties and is found more frequently among women than among men.

Symptoms. Much that has been said of neurasthenics applies also to hypochondriacs. These patients often have a multiplicity of complaints which they do not attempt to restrict to any logical group of symptoms. They may complain of uncomfortable and peculiar sensations in the general area of the stomach, the chest, the head, the genitals, or anywhere else in the body.

Usually they have some trouble giving a precise description of their symptoms. They may begin by mentioning pain in the stomach, which on further questioning is not pain, but a gnawing sensation, which later is described as a pressure sensation, and in turn as a feeling of heat. Their general mental orientation keeps them constantly on the alert for new illness manifestations. They are avid readers of popular magazines on medical subjects, and are apt to feel certain they are suffering from each new disease they hear or read about.

Tuberculosis, cancer, tumors, and numerous other disease conditions are readily diagnosed by hypochondriacs. Their morbid preoccupation with bodily processes, coupled with ignorance of medical pathology, often leads to some interesting diagnoses. They

may become convinced that their lungs are drying up, or that their stomach lining is being eaten away, or that their brain is rotting, and so on. One patient diagnosed his condition as "ptosis of the transvex colon," and added, "If I am just half as bad off as I think, I am a dead pigeon."

This attitude is quite typical: They are sure they cannot recover. Yet—and this is revealing—despite their exaggerated concern over their health, they do not usually show the fear or anxiety that might be expected of those suffering from such horrible ills. The fact is, they are usually in fine physical condition and have an excellent appetite. But it must not be assumed from this that these patients are malingering, for they are utterly sincere in their conviction that their symptoms indicate real illness.

A classic illustration of the shifting symptoms and complaints in a very severe hypochondriacal reaction is presented in an entertaining way in the following letter which a hospitalized neurotic patient wrote to her anxious relatives.

"Dear Mother and Husband,

"I have suffered terrible today with drawing in throat. My nerves are terrible. My head feels queer. But my stomach hasn't cramped quite so hard. I've been on the verge of a nervous chill all day, but I have been fighting it hard. It's night and bedtime, but, Oh, how I hate to go to bed. Nobody knows or realizes how badly I feel because I fight to stay up and outdoors if possible.

"I haven't had my cot up for two days, they don't want me to use it.

"These long afternoons and nights are awful. There are plenty of patients well enough to visit with but I'm in too much pain.

"The nurses ignore any complaining. They just laugh or scold.

"Eating has been awful hard. They expect me to eat like a harvest hand. Every bite of solid food is agony to get down, for my throat aches so and feels so closed up . . .

"With supper so early, and evening so long, I am so nervous I can't sleep until so late. I haven't slept well since I've been here. My heart pains as much as when I was at home. More so at night. I put hot water bottle on it. I don't know if I should or not. I've been wanting to ask some Dr.

"I had headache so badly in the back of my head last night and put hot water bottle there. My nurse said not to.

"They don't give much medicine here. Mostly Christian Science it seems! Well I must close or I never will get to sleep. My nurse gets off at 8 15 so she makes me go to bed by then.

"My eyes are bothering me more.

"Come up as soon as you can. My nose runs terrible every time I eat.

"The trains and ducks and water pipes are noisy at night.

ANNIL"

(Menninger[43], pp. 139-140)

There is often an excessive and morbid preoccupation with digestive and excretory functions. Some of these patients keep charts of their bowel movements and most of them are able to give highly specific information concerning diet, constipation, recent trends in evacuation, and so on.

In addition to their diagnostic evaluations of themselves, hypochondriacs are constantly searching for new cures for their ailments. They keep up with new methods of treatment reported in popular magazines and newspapers, and are prone to the indiscriminate use of a wide range of medicants. They are usually well abreast of the latest creations in laxatives, and many of them become food faddists and exponents of high colonic irrigation and an infinite variety of other treatment procedures.

Dynamics. Most of us are interested in our bodies and their functioning. In fact, health ranks at the top of the list of subjects that are of general interest. The hypochondriac, however, shows a morbid exaggeration of this common interest and concern. A careful review of such patients' lives usually reveals a









Overdependency

THE DEVELOPMENT OF A HYPOCHONDRIACAL REACTION

Stills from the film *Overdependency*, produced by the National Film Board of Canada

A neurotic reaction pattern such as hypochondriasis usually has its roots in earliest childhood. So it was with Jim Howard, whose development is portrayed in this film. For as long as he could remember, he had been "delicate." His overprotective mother and older sister watched over him anxiously, magnifying every slight illness and keeping him from school, where he might have learned to meet his problems instead of escaping from the need to face them by not feeling well.

His father could have helped Jim gain confidence in himself, but he accepted the fact that his son was "frail." Jim would watch wistfully as his father prepared for a fishing trip, then he would be impatiently brushed aside. Because of the false role in which his family had placed him, Jim could never hope to be a companion to his father. His older brother, on the other hand, was a "regular fellow" whose assurance and competence only accentuated Jim's feelings of inadequacy.

Only the little girls in the neighborhood accepted him as a playmate, and Jim had to content himself with "playing store" and other "sissy" games with them. He was acutely conscious that he was not like other boys and rebelled under their taunts. But when he made eager attempts to join their rough-and-tumble games, he was jeeringly rejected. This rejection was spurred on by his older brother, who was thus unconsciously compensating for the lack of attention given him at home. Jim's only refuge was his mother, who comforted and petted him after every rebuff.

Quite naturally, adulthood did not bring maturity. The many habits of dependency, normal for a

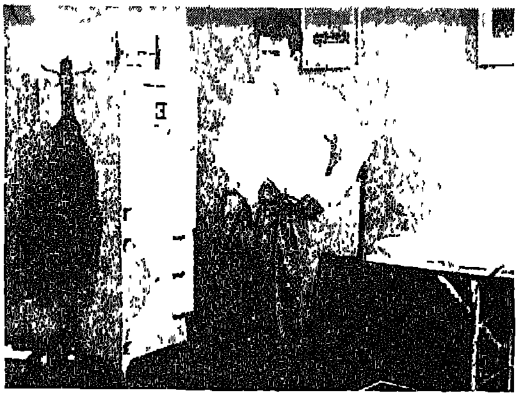




child, continued long past childhood. Jim's wife, Marion, was an older girl who carried on where mother and sister had left off. She was strong and capable and enjoyed treating him as her "little boy," who was indulgently allowed to sleep past his work-time because he was 'so tired,' and she sympathetically aided in pampering his vague aches and weaknesses. So Jim was only physically adult. Faced with decisions, even the small one of choosing a tie, he was helpless. His dependency on others showed in many ways—borrowing a nickel for a phone call, expecting someone else to light his cigarette, letting other people make his apologies for jobs not done or appointments not kept.

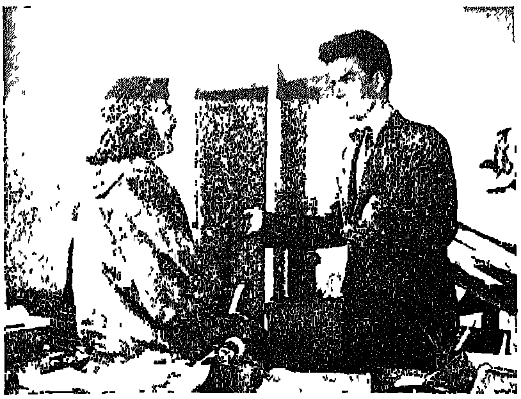
Every minor crisis at work drove him deeper into self-pity and hypochondriasis, until his wife at last made an appointment for him to see a doctor. Surprised and disappointed in the doctor's diagnosis that nothing was physically wrong, he turned as usual to his mother. True to form, she reassured him that the doctor was wrong and that he of course was "not strong."

Through psychotherapy over a period of time the doctor helped Jim to understand the train of events that had led to his neurotic pattern, and the unconscious purposes for which he was using it. The doctor also talked to Jim's wife and helped her to understand how she had unwittingly fostered Jim's dependence on others. Fortunately she was able to continue to give him the love and encouragement he needed while at the same time not letting him lean on her as before. It was hard for Jim to learn to rely upon himself instead of others and to meet his problems instead of avoiding them by getting sick, and it required adroitness on Marion's part to keep his mother from undoing the doctor's work. But with the help of wife and doctor, he slowly and after many setbacks learned to respect and stand by his own decisions. Successful at last in his work, he found he no longer needed his neurotic defenses.









strong early interest in their bodies which may have taken the form of special attention to diet, marked pride in physical fitness, or perhaps special attention to proper hours of sleep This tendency, then, apparently becomes exaggerated as a hypochondriacal reaction to disappointing life experiences and situations in adult life

This reaction serves the same function as the asthenic reaction in protecting the patient from his feelings of failure, for we obviously cannot hold a sick person responsible for the same level of achievement as we would a well person Furthermore, his status in the eyes of other people is assured, and there no longer is the necessity for further striving toward unattainable and therefore hurtful goals. In a general way the anxiety aroused by his stress situation is displaced to a concern and preoccupation with his body and its functioning.

In addition to all the other benefits, the increased interest which the patient devotes to himself and which he receives from doctors and others endows him and his body with increased significance and importance. Most of us feel pretty important when we have the undivided attention of doctors and the sympathetic interest of our friends and family. This, of course, helps to compensate for feelings of inferiority and failure

By maneuvering his symptoms with a measure of finesse the hypochondriac too can often control the behavior of other people For example, when some activity is planned in which he does not wish to participate, an unexpected intensification of his pain or other symptoms may force the others to give up their plans and accede to his wishes

Predisposing factors. A variety of early experiences may predispose an individual to the later use of hypochondriacal reactions. Among the most important of these are.

1. *Hypochondriacal parents* Just as the child adopts other attitudes and reaction patterns from examples set by the parents, he also may become extremely sensitive to and concerned with his various bodily functions if his parents show the same tendencies. Fortunately, one or the other parent is usually free from such attitudes and symptoms and may develop a skeptical attitude in the child which makes it impossible for the child to use such reactions effectively However, a child can hardly escape being somewhat influenced by any parental example in hypochondriasis, and to this extent he becomes himself more prone to the development of similar reactions

2. *Parental overconcern* As was brought out in the discussion of neurasthenia, when the anxious parent is continually commenting upon and worrying about every little illness manifestation, the growing child is likely to develop attitudes conducive to later neurotic illness reactions Each cold, cough, sneeze, failure in bowel movement, or vague pain becomes a matter of major concern to both the parent and the child, and the child learns to have far too much concern for his bodily functions, as well as learning that physical complaints give him a definite power over other family members.

3. *Early illness or injury* A history of illness or injury may also predispose the child to the development of hypochondriacal behavior. Particularly is this true, of course, when these factors are combined with parental overconcern When the illness or injury is met with a great deal of fuss and extra affection, the individual may thereby be able to maintain a most gratifying position in the family for some period of time Then in later life, when faced with a difficult stress situation, he may unconsciously regress to and focus his attention upon alleged illness Again the dynamics of such a reaction involve escape and various secondary gains

Precipitating factors Hypochondriacal reactions are typically precipitated by disappointing situations in which one feels that he has failed to achieve his aspirations. During the early forties the stress situation is often particularly conducive to hypochondriacal reactions in a predisposed individual For it is

during this period that he often realizes for the first time that he is going to live only once and that his life pattern is pretty well determined, for better or for worse. When his evaluation of his life situation is unfavorable—that is, when he feels that he has failed to achieve his cherished hopes and dreams and perhaps finds his occupational and marital situation far from satisfactory—the stage is set for the appearance of hypochondriacal illness which will excuse his failure, remove the need for further striving toward hopeless goals, and enable him to gain some compensatory gratification via the increased attention he devotes to himself and the sympathy and concern he receives from others

Since this is also the period during which we all start on our long downward trail of physical decline and death, he now has some real reason for being especially sensitive to his bodily functions and physical well-being As a result, he is prone to reaction sensitivity to the slightest state of ill health and is also apt to interpret the heart palpitations, diarrhea, and other anxiety symptoms which are common during this period as evidences of serious physical illness.

The following brief illustration shows the basic dynamic pattern often found in hypochondriacal reactions

The patient was a 37-year-old male who had been largely supported by an overly protective and overly solicitous mother. His level of aspiration was unrealistically high in terms of his occupational skills, and he could not tolerate the idea of doing "menial" work. He had taken a civil service examination for policeman in which he was very much interested but had been disqualified on the medical examination due to an old scar over his left eye which was the result of an injury received long before in an automobile accident. On learning of his medical disqualification the patient purchased a black eye patch which he wore over the "afflicted" eye because it was "out of commission" A few days later he bought a leather wrist band because an old sprain in his wrist had suddenly been reactivated when he attempted to help his mother move some furniture To complete his physical disability, he noticed that his heart would palpitate and "act up" whenever he was on his feet for any length of time His mother finally insisted that he come for psychological assistance During his first interview, he assured the therapist "Well there's no use kidding myself, I am a sick man I have a bad eye which prevents me from most good jobs. My wrist hasn't healed properly from an old injury, and I can't do any heavy lifting And the crowning blow is my heart which keeps acting up There's no use kidding myself, doctor, I'm a sick man"

This reaction sensitivity to bodily processes may be markedly enhanced by feelings of guilt over past moral transgressions, such as masturbation or promiscuous sexual relations Feelings of guilt keep the neurotic apprehensive and on the alert for the signs of the punishment that he fears.

A hypochondriac diagnosed his condition as general paresis (syphilis of the brain) The fact that he had gone to five different doctors who could find no evidence of syphilitic infection was somewhat disappointing but did not change his own diagnosis He *knew* that he had general paresis Investigation revealed that he had marked feelings of guilt over previous relations with several prostitutes However, the guilt feelings were only part of a much larger picture in which there were pronounced feelings of failure, inferiority, and disappointment The guilt feelings served to convince the patient of the validity of his symptoms

Occasionally a hypochondriacal reaction may be superimposed upon an actual lasting injury or organic illness, but the dynamics here are no different from the cases already discussed. The hypochondriac utilizes these actual physical disabilities as a defense against feelings of failure and as an escape from future striving And where he evaluates his injury or illness as so severe that it puts him

out of the running, his evaluation automatically prevents him from developing the healthy attitudes and reaction patterns which could overcome his handicap He evades his problems by giving up and resigning himself to his allegedly hopeless condition Much self-pity is displayed and much help and sympathy are constantly sought from other people

Hypochondriacal reactions frequently complicate the symptom picture in other types of psychopathological reactions They are commonly found as part of the picture in involutional melancholia, depressive reactions, and schizophrenia, as well as in other neurotic reaction patterns In psychotic disorders, hypochondriacal symptoms are usually more bizarre than in neurotic disorders The patient may be convinced that his stomach has decayed into dust or that his brain has turned to glass.

It is often important in the diagnosis of hypochondriasis to be certain that it does not represent a beginning depressive or schizophrenic reaction Particularly where the hypochondriacal reaction is found among young people, it is apt to be a forerunner of schizophrenia (Menninger[45])

Hypochondriasis is usually very resistant to treatment These patients must believe in their symptoms if they are to escape from their stress situation, for the only other alternative is to face their problems As a result, such patients are apt to discontinue psychiatric treatment when they are told that nothing is organically wrong with them However, as long as a doctor is willing to listen to their long list of complaints and to prescribe harmless but bad-tasting medicines, they are usually willing to continue "treatment"

CONVERSION REACTION (HYSTERIA)

Conversion reaction is a neurotic defense in which symptoms of some organic disease appear without any actual underlying organic pathology It is one of the most intriguing and baffling of all the psychopathological syndromes This reaction is still sometimes referred to as *hysteria*—the latter term being derived from the Greek word meaning "uterus" It was thought by Hippocrates and other ancient Greeks that this disorder was restricted to women and was caused by the wandering of a frustrated uterus to various parts of the body because of its pining for children For example, the uterus might lodge in the throat and cause choking sensations, or in the spleen, resulting in temper tantrums Hippocrates thought there was a frequent relationship of hysterical symptoms to sexual difficulties and considered marriage the best remedy for the affliction

This concept of the relationship of sexual difficulties to hysteria was later advanced in modified form by Freud He used the term *conversion hysteria* to indicate that the hysterical symptoms were an expression of repressed and deviated sexual energy—that is, the psychological-sexual conflict was *converted* into a bodily disturbance A sexual conflict over masturbation might be solved by developing a paralyzed hand This is not done consciously, of course, and the meaning of the symptoms is completely lost on the patient This dynamic concept of conversion has been largely retained in modern psychiatry, but many other types of psychological conflicts in addition to sexual conflicts are now seen as important factors which contribute to the development of conversion reactions.

During the stress of both recent wars, conversion reactions were relatively common among service personnel In World War I they were the most frequent psychoneurotic reaction In civilian life, with our sophistication and increasing medical knowledge, hysterical reactions have become fairly rare. Those that do occur are mainly among adolescents and young adults, and in general they are more frequent among women than among men Despite their decreasing incidence, hysterical reactions are important historically and dynamically and merit rather detailed consideration

Symptoms. In a medical age which no

longer believes in being "struck" dumb, blind, or with paralysis, patients are developing fewer of these symptoms and more of the vague aches and pains which are harder to diagnose as functional However, conversion reactions may simulate a wide range of organic illnesses, and the specific symptoms that may occur are legion.

1. *Sensory symptoms* Any one of the senses may be involved in sensory conversion reactions. The most common forms are

anesthesia—loss of sensitivity
hypesthesia—partial loss of sensitivity
hyperesthesia—excessive sensitivity
paresthesia—exceptional sensations, such as tingling

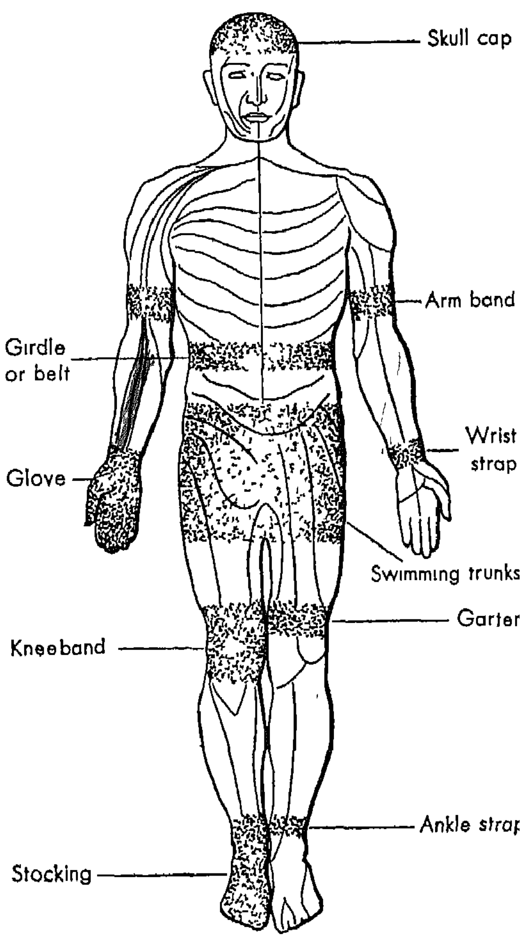
Anesthesias, formerly so common in hysteria, are now quite rare* For the adaptive value of the symptoms is lost if they can be readily shown on superficial medical examination to have no organic basis. This does not necessarily mean that the patient himself is particularly impressed by such evidence but that society is no longer so impressed with the result that the symptoms lose the various primary and secondary gains associated with social acceptance

Blindness, deafness, and loss of touch and pain sensitivity in various areas of the body are the most common of the anesthesias still found Occasionally the patient may lose his sense of smell but this is rare In a rather interesting case of this type an elderly lady lost her sense of smell when her only son began to drink excessively and came home repeatedly with the odor of alcohol on his breath.

Despite the fact that there is no actual organic pathology in these cases, the loss of sensitivity is quite real. In hysterical *analgesia* (loss of pain sensitivity) the patient feels no pain when stuck with a pin

Yet this loss of sensitivity, though real, may be selective. In cases of hysterical blindness the patient may carefully avoid bumping into people or objects in his path He also usually dodges missiles thrown at him Similarly, Rosenberger and Moore[59] cite the case of a patient with hysterical deafness who dived to the floor in a prone position when the therapist grasped his arm and shouted "Planes! Planes! Hit the dirt!"

These are the typical areas for which hysterical anesthesias are developed Their correspondence with articles of clothing rather than with nerve pathways is clear evidence that their origin is psychological rather than neurological



Adapted from Karnosh and Zucker[8]

* This is true only of anesthesias which constitute part of the patient's verbal complaints Actual areas of anesthesia of which the patient may be entirely unaware (e g , corneal anesthesia) remain relatively common Miller[40] found that 64 out of 69 men diagnosed as hysterics in the armed forces had bilateral corneal anesthesia

Some idea of the range of sensory symptoms which may occur in conversion reactions can be gleaned from Ironside and Batchelor's[32] study of hysterical visual symptoms of airmen. They found blurred vision, photophobia, diplopia, night blindness, intermittent visual failure combined with amnesia, deficient stereopsis, the tendency to look past an object which the subject is attempting to fixate, intermittent loss of vision in one eye, jumbling of print when the subject attempts to read, and failing day vision.

It was also found that the symptoms of each patient were closely related to his performance duties. Night fliers, for example, were more subject to night blindness, while day fliers more often developed failing day vision.

Still other visual symptoms include triplopia, "tunnel vision" (involving various degrees of restriction of the visual field), micropsia (in which objects appear unusually small), macropsia (in which they seem unusually large), and in rare cases even colorblindness (Campbell[8]; Michaelson[48]). Despite the fact that such symptoms show up clearly in direct clinical testing, patients are usually able to drive a car or fly a plane without any difficulty.

2. *Motor symptoms.* Hysterical motor disturbances, too, cover such a wide range of symptoms that only the most common of them can be mentioned here. Either loss or disturbance of motor ability of various muscles may be involved.





These pictures show a patient before and after psychotherapy for a hysterical bent back. In this case the hysterical symptoms were superimposed on a previous actual injury which X rays and careful examination showed had healed. Upon induction into the Army the patient began to feel a constant low back pain before the onset of acute symptoms and was excused from long hikes. He did not adjust well to his robust outfit, the pain became worse, and five months after his induction he was hospitalized. He complained that he could not stand straight because the pain pulled him forward. However, he was able to lie flat on his back without pain. He became emotional on slight provocation and sometimes displayed a tremor. Within a week after psychotherapy commenced, the patient stood erect and had only a slight limp, which was apparent only when he thought he was being observed. Within two weeks all the symptoms had disappeared. (Adapted from Hamlin[26], pp. 297-299)

Hysterical paralyses are usually confined to a single limb such as an arm or leg, although occasionally the entire right or left side of the body may be affected. There may be various degrees of the paralysis too: the movement of the limb may be completely lost or only diminished. Here, too, the loss of the function may be selective. For example, in writer's cramp the patient cannot write, but may be able to use the same muscles perfectly well in shuffling a deck of cards or playing the piano

Tremors (muscular shaking or trembling) and tics (unconscious localized muscular twitches) are common Occasionally there are contractures, which usually involve the flexion of fingers and toes or rigidity of the larger joints such as the knees and elbows. Paralyses and contractures frequently lead to walking disturbances A patient with a rigid knee joint may be forced to throw his leg out in a sort of arc as he walks

Another walking disturbance worthy of mention is one called *astasia-abasia,* in which the patient can usually control his leg movements when sitting or lying down, but can hardly stand and has a very grotesque, disorganized walk, with his legs wobbling about in every direction

The most common hysterical disturbances of speech are *aphonia,* in which the patient is able to talk only in a whisper, and *mutism,* in which the patient is unable to speak at all. Often, interestingly enough, a patient who can speak only in a whisper will be able to cough in a perfectly normal manner. In true laryngeal paralysis both the cough and the voice are affected. Aphonia is a common symptom in hysteria and frequently comes on suddenly after some emotional shock. Hysterical mutism is relatively rare.

Occasionally patients evidence hysterical convulsions or "fits" similar to epileptic convulsions However, the conversion patient shows few of the usual characteristics of true epilepsy—he rarely if ever injures himself, his pupillary reflex to light remains unaffected, and he is not incontinent.

In addition, hysterical convulsions almost always take place in the presence of other people. Hysterical fainting attacks, too, rarely take place when the patient is alone In hysterical fainting the loss of consciousness is apparently a defensive reaction which affords some relief from an unpleasant stress situation and is not related to any demonstrable disturbance in circulation or metabolism of the brain (Romano and Engel[57])

3. *Visceral symptoms* Hysterical visceral symptoms include headache, "lump in the throat" and "choking" sensations, coughing spells, difficulty in breathing, cold and clammy extremities, belching, nausea, vomiting, and infinite assorted vague aches and pains Occasionally there is persistent hiccoughing or sneezing. In one case a fourteen-year-old-girl sneezed almost continuously for over three weeks before she was brought to the attention of a competent therapist

Another rare condition sometimes classified under hysteria is *anorexia nervosa* (Lorand[39]; Masserman[41], Pardee[53]; Rose[58]; Small and Milhorat[60]) Here there is a loss of appetite and limitation of food intake, with progressive emaciation. Unless successfully treated, the patient may actually die of starvation or fall victim to tuberculosis or pneumonia.

The ability of hysterics to simulate actual disease symptoms is almost unbelievable In a pseudo attack of acute appendicitis, not only may the patient evidence pain in the lower abdominal region and other typical symptoms of acute appendicitis, but his temperature may even shoot up far above normal Merrill[40] cites cases of psychogenic "malaria" And Gould[28] describes the case of a young woman "who had all the usual evidences of tuberculosis—coughing, loss of weight, night sweats, recurring fever, and the rest" (p. 270) Yet there was no organic tuberculosis

Thus it is not surprising that hysterical symptoms have led to a great many unnecessary operations Bennet and Semrad[6] reviewed 100 cases of psychoneurosis admitted under diagnosis of various organic diseases to

a university hospital. Of the 100 cases, 72 had been mistakenly diagnosed as serious organic gastrointestinal disease, toxic hyperthyroidism, organic cerebral disease, and disease of other bodily systems. A total of 179 surgical operations had been performed on these patients, at least half of which were unnecessary Sadler[61] relates the story of a hysterical patient who had several operations for appendicitis, during the last of which the surgeon tattooed on the abdomen this surgical warning, "No appendix here" (p 321)

In spite of this frequent mistaken diagnosis, there are several criteria for distinguishing between hysterical and organic disturbances, most of which have already been suggested·

a) A certain *belle indifference* of the hysteric We have already pointed out that although these patients occasionally show some concern over their ailments, they usually make their complaints in a rather matter-of-fact way, with little of the anxiety and fear that would be expected in an individual with a paralyzed arm or loss of hearing

b) The frequent failure of the hysterical dysfunction to follow a feasible anatomical pattern in terms of actual nerve distribution Also, in paralyses there is no atrophy or wasting away of the paralyzed limb except in very rare and long-standing cases

c) The selective nature of the dysfunction the fact, for example, in hysterical blindness that the patient does not ordinarily bump into people or objects, or the fact that paralyzed muscles can be used for some activities and not others. It is interesting to note in this respect that hysterical contractures disappear during sleep

d) The interesting fact that under hypnosis or narcosis the symptoms can usually be induced, removed, or shifted by the suggestions of a skilled therapist Similarly, if the patient is suddenly awakened from a sound sleep, he may be tricked into talking or into using a paralyzed limb

It is usually fairly easy, too, to distinguish between hysteria and malingering. The malingerer is voluntarily perpetrating a fraud and this fact is reflected in his demeanor. Whereas the hysteric is usually dramatic, effusive, and apparently naive, the malingerer is inclined to be defensive, surly, evasive, and suspicious. When inconsistencies in his behavior are pointed out, the hysteric is usually unperturbed, the malingerer immediately defensive. Finally, the hysteric is mainly concerned with his symptoms and willingly discusses them, whereas the malingerer is apt to be reluctant to be examined and slow to talk about his symptoms lest his pretense be discovered (Gill[21]).

Dynamics In conversion reactions the patient avoids or solves some problem by getting sick. As in the other neurotic reactions, the symptoms protect him from having to face the traumatic situation, and at the same time bring him secondary gains in extra sympathy and attention as well as some control over the people around him These points are well illustrated in the following rather dramatic example of a conversion reaction·

"... Since a child, this young woman cherished vague and beautiful ideas of her own charm, refinement and artistic ability Her ambitions were stimulated and fostered by an admiring family circle, a protected life, and a group of friends whose admittance to friendship, consciously or unconsciously, depended on their uncritical admiration. The more or less deliberate purpose of her striving was to insure and magnify the admiration and uncritical affection of her friends through the talented use of a great voice

"Now the day approaches when her voice is to be tested, not by the admiring circle, but by a critical professional teacher who is to determine the course of her vaguely planned career This day has approached before, but she has always had a severe headache or a bad throat or some other rather sudden but not infectious ailment which has prevented her meeting the test

" ... Finally, an act of will, or perhaps an access of ambition ... and she actually goes to the

test. She passes the earlier and simpler parts of the audition with fair credit, though with some trepidation Then comes a more crucial, a more important, and far more difficult step in the trial, involving an uncompromising test of real quality of voice and real ability of technique Something happens. Her voice cracks at the very beginning of this important step, her throat hurts, she has suddenly become hoarse It is impossible to carry the test further She explains quite honestly to the teacher that she has a very delicate throat and that she did not realize it was in such shocking condition, furthermore, she ought not to have attempted the test She goes home to much genuine and deserved sympathy. She becomes voiceless for several days or weeks

". . . and she rationalizes the episode as follows The test, because she took it when her throat was in poor condition, has strained her voice Of course, the teacher should have known better Ever after she refers to it sadly as the time when her voice was strained by an injudicious and premature test to which she was led by her inexorable courage and ambition Furthermore, she says now, that because of this accident she is unable ever to sing well, the inference being that she did sing well before, which is probably not the fact, as her voice, though apparently quite normal, is of very small calibre and mediocre quality However, the automatism of escape has 'saved her face.' It has saved the pretty picture of her great artistic ability, and has transferred the vision of her powerful and charming performance from the future to the past, and, furthermore, it has given her a perfectly satisfactory explanation and justification in perpetuity for the manifest discrepancy between the greatness of her talent and the hopeless mediocrity of her best possible performance" (Coon and Raymond[11], pp 224-225)

In the history of conversion reactions there is usually the following chain of events first, a desire to escape from some unpleasant situation, second, a fleeting wish to be sick in order to avoid the situation (this wish, however, is suppressed as unfeasible or unworthy); third, under additional or continued stress the appearance of the symptoms of some physical ailment At this point the original wish has been repressed and the symptoms have been substituted for it Thus the patient sees no relation between his symptoms and the stress situation. The particular symptoms that occur are usually those of a previous illness or are copied from other sources—such as illness symptoms observed among relatives or in the movies, or read about in magazines

What can be said about the personality of the individual who attempts to solve serious problems by getting sick? It should be remembered in this connection that most of us at one time or another have probably solved some problem or avoided something we didn't want to do by pleading sickness. In fact, the common saying, "I don't feel like doing it," shows the prevalence of this type of reaction. The neurotic, however, is the individual who resorts to this sort of reaction in the face of a serious problem even though it disrupts his entire pattern of everyday activities This means an emotionally immature, hypersensitive, childish individual.

In addition, a hysteric typically has an intense need for attention, approval, and affection, and hence is easily swayed by the suggestions and commands of others. His symptoms represent a regression as well as a withdrawal in the face of a problem which he feels unable to solve Through his sickness he can become a child again, carefully protected and secure from harm

In general, the I Q of the hysteric is lower than that of the other psychoneurotics It should be pointed out, however, that practically anyone may evidence conversion reactions if the stress situation becomes severe enough and there is apparently no other solution

Several kinds of purposes may be served by hysterical reactions involving somewhat different dynamic patterns

1. Sometimes a conversion reaction is used directly as a means of removing the individ-

ual from some unpleasant or dangerous situation. An acquaintance of the author has fainted twice on the way to the altar, each time with the same girl, whom he had a severe conflict about marrying. Halpern[25] reports fifteen cases of hysterical amblyopia* in the armed forces which developed at a port of embarkation and which cleared up when the patients were removed from the conflict situation by hospitalization. These reactions have sometimes been called "gangplank fever." The same pattern is apparent in the case history of the would-be singer whose throat could not stand the strain. By getting sick the patient diverts attention from his failure, provides himself with a convenient excuse, and in the process fools both himself and others—all quite unconsciously, of course: his symptoms are real and he has no conscious control over them.

2. Frequently hysterical illness represents an attempt by the individual to regain lost social status. Clardy[10] cites a case of conversion hysteria in a ten-year-old boy which illustrates this particular dynamic pattern. The onset of the symptoms began with an attack of pain which was diagnosed as acute appendicitis. The symptoms quickly went away, but recurred daily, often in conjunction with trembling spells. The boy was eventually admitted to the Children's Group at Rockland State Hospital, where the following incident is reported.

"Two days following his admission an attendant came upon Harold while he was drinking a cup of water. His actions appeared normal until he saw this attendant when his arms and legs began to twitch. He became upset and cried for several minutes. About five days later he had another spell and was examined at this time by a neurologist who made the following statement, 'He was having twitching movements of an irregular patternless type, grimaces of the face, sudden 'startle' movement, clenching and unclenching of the hands, and rhythmic flexion and extension of the lower extremities. There was no loss of consciousness. Although the child was crying he did *not* appear to be extremely upset.'" (Clardy[10], p. 331)

The boy had been the center of attention for years when his father met with an accident and developed severe convulsive seizures. As a result, a considerable amount of attention and care which had formerly been given to Harold was now directed toward his father. By the development of a somewhat similar pattern the child was apparently attempting to regain his lost position as the center of affection and attention.

3. Occasionally conversion reactions grow out of feelings of guilt and the necessity of self-punishment. In one case, for example, the patient developed a marked tremor and partial paralysis of the right arm and hand after an attack upon her father during which she clutched and tore open his shirt with her right hand. The paralysis in this case undoubtedly represented a sort of symbolic punishment of the "guilty party."

4. Conversion symptoms may also represent revenge for alleged harsh or cruel treatment in which the patient gains a feeling of satisfaction in making others feel that their inconsiderate treatment has made him sick.

5. Sometimes when there is an actual physical illness, hysterical symptoms develop and remain after the actual organic trouble has cleared up. If a cold temporarily enables the patient to avoid some highly unpleasant problem, he may unconsciously prolong his invalidism. Similarly, a soldier who has wounded an arm in combat, and who expects to be returned to combat once his arm has healed, may find his arm exceptionally weak for an abnormally long time after the actual physical wound has healed.

6. In some cases the hysterical symptoms develop following some accident or injury as a result of which the patient hopes to receive some monetary compensation. As Guthrie[24] has pointed out, these reactions usually occur

* See Glossary

after accidents in which the patient might have been seriously injured but is actually only shaken up or slightly injured. Later, in relating the experience to friends it may be agreed that the patient would have had a strong legal case if he had been injured. Is he sure that he is all right? Could he possibly have injured his back? After a few careful exploratory movements, the patient may actually notice that he does seem to be a little "stiff." Perhaps there *is* something wrong with his back. With the aid of a sympathetic lawyer, the patient may proceed to file suit for his alleged injuries.

Here it is especially hard to distinguish between the malingerer's deliberate simulation of injury and the unconscious deception of a hysteric. Apparently in many hysterical cases there is an admixture of the two, in which conscious acting is superimposed on unconscious acting. In these cases the patient shows an amazingly rapid recovery once he has been properly compensated for his "injuries."

The relationship between compensation and hysterical illness symptoms has been graphically demonstrated in the case of "writer's cramp." This was formerly thought to be an occupational disease brought on by too much writing and is relatively common in England, where the disorder is recognized as a compensable disease under the British Workman's Compensation Act[7]. In an examination of 1880 psychoneurotic British soldiers, Parr[52] found that 171 had writer's cramp, although only six, all clerks, had done a great deal of writing. Apparently most of them developed their symptoms in the face of uncongenial jobs that required only a little writing. In the United States, where this disorder is not a compensable disease, writer's cramp is practically unknown.

7. Hysterical patients are very suggestible and can frequently be made to evidence almost any symptom that is suggested to them. Many times in the course of their examinations, doctors inadvertently suggest symptoms which are readily picked up by the patient.

Treatment. As in the case of other neurotic reactions, having to give up the illness symptoms would bring the hysterical patient face to face again with his real problems. Consequently, despite the fact that such patients often have a conscious verbalized desire to be "cured," they unconsciously resist treatment and rarely enter into the therapeutic situation with full cooperation. When a treatment procedure begins to show some results, they are likely to abandon treatment, occasionally with outspoken criticism of the doctor or clinic.

Hysterical symptoms have sometimes been removed by various "miracle" cures. Such cures are apparently based in part upon the suggestibility of the hysteric and in part upon the general promise of "magical" or "miracle" cures to relieve him from all problems with no effort and no necessity to face painful conflicts. But unless there is also an acceptance of some philosophical or religious way of life which does actually enable the patient to avoid or solve his problems, such "cures" are usually short-lived and the hysteric soon redevelops the same or other illness symptoms. As in other neurotic reactions the only adequate treatment of the hysteric is an intensive psychotherapy aimed at helping him to achieve a more mature and adequate personality adjustment.

Hypnosis and narcosis have proved to be helpful adjuncts to therapy, especially in removing the illness symptoms. (Both these techniques will be discussed at greater length in Chapter 13.) As in the case of "miracle" cures, however, removal of the symptoms does not necessarily mean a cure for it does not get at the root of the problem.

Group conversion reactions. In our historical introduction to the development of contemporary psychopathology, it was pointed out that outbreaks of "mass hysteria" (St. Vitus' dance, "mewing" and "biting manias") were common during the Middle Ages. In recent times such outbreaks have become a rarity. Schuler and Parenton[63], however, report an interesting case of a recent epidemic

of hysteria in a high school.* This episode is of particular significance because it demonstrates quite clearly the dynamics underlying the development of a hysterical conversion reaction in one high-school girl and its subsequent spread to others.

All of the students involved in this epidemic of hysteria were girls ranging in age from 16 to 18, who at the time were sophomores, juniors, or seniors in the high school. They were all normally attractive, intelligent, well informed, and apparently free from superstitious beliefs. The chronological sequence of events was somewhat as follows:

Saturday, January 28. Helen A., aged 17, one of the more popular girls in the senior class, developed a spasmodic twitching and jerking of her right leg while watching the dancing at the annual Alumni Homecoming Dance.

Tuesday, February 21 (Mardi Gras). Public dance attended by Millie and Frances, two of the girls who subsequently developed the hysterical symptoms. About one o'clock Wednesday morning, after returning to her friend's home from the dance, Millie suddenly developed an involuntary convulsive jerking in the diaphragm, chest, and neck.

Wednesday, February 22. Millie's disturbance continued during the day, but she attended all her classes. After returning home that afternoon she was examined by the family's physician, who prescribed rest at home for a few days.

Thursday, February 23. The morning was rainy, and the pupils gathered in the assembly hall before the beginning of classes. At this time Helen was observed by many of the students experiencing one of her attacks, which, by this time, had become a common occurrence.

Apparently nothing unusual took place during the first class period, but during the second hour in a French class, Frances began her involuntary spasmodic movements, which continued for some time without interruption and soon became noticeable to the class. She was then taken to the infirmary, where some of the older students attempted to care for her. In the meantime her friend, Geraldine P., aged 16, who sat at the next desk, had been getting increasingly nervous. In her own words: "First I trembled a little. Then everybody kept saying, 'Look at Geraldine.' And then I started jumping. Then they carried me upstairs to the infirmary and I started crying. They gave me ammonia, but that didn't help. Plenty of girls tried to hold me down, but they couldn't."

During the course of the preceding events another unusual development was taking place. A greatly agitated and poorly informed mother drove up in the family truck and loudly demanded her children. Over the public address system, which reached every room and the playground and was clearly audible for blocks around, the principal requested the specified children to report to his office immediately. Shortly thereafter these children returned to their respective rooms to get their belongings, and then left precipitately. Soon more cars and trucks began to stream in, and more and more children were called from their classes. With these further unexplained departures, coupled with the sounds of nervous crying, and hurried running to and fro in the halls, the curiosity and anxiety of the school children was tremendously activated. The principal, in a vain attempt to reassure the panicky students as well as the nervous and fearful parents, called a special assembly—but to no avail. For in the meantime news and rumors of the 'strange goings-on' at the Bellevue High School were being spread by the returning parents and children, and the noise and confusion of arriving and departing cars was increasing. With the break-up of the assembly and the beginning of recess, the children scurried around and pressed forward in an attempt to see and hear as much as possible of the hysterical subjects. Some of the latter were to be seen in the principal's office, some were being administered ammonia water by a practical nurse in the infirmary, and still others, who had not developed the hysterical motor symptoms but who were

*Another recent instance of "mass hysteria" is described by Johnson[34]

making a material contribution to the general confusion by uncontrolled fearful crying, had been taken to the nearby teacherage. One of the witnesses described it as a "stampede." The children were running up and down and all around trying to get a whiff here and a whiff there.

By this time the confusion and disorganization had reached such proportions that the school bus drivers were assembled and school was dismissed by authority of the Parish Health Office. The children who remained were then taken home, and the last reported case of hysteria appeared in one of the girls during her bus ride home. The children had been talking and joking about the morning's developments, and this reaction was apparently precipitated by a chance remark of the driver, who reportedly said, "If you want to talk about the jerks, why don't you practice them?" Whereupon Mildred W., aged 17, began to jerk and twitch in the same manner as the other cases.

During the same afternoon the director of the Parish Health Unit, together with other physicians including two representatives of the State Board of Health, investigated several of the cases. The possibility that the epidemic might have had a bacteriological basis was explored and eliminated. Sedatives, rest, and absentism from school for one or two weeks were prescribed, together with the suggestion that the less attention called to the hysterical symptoms, the sooner they would probably disappear. School reopened the following Monday but despite official measures of reassurance, a full week was required for attendance to return to normal.

In attempting to explain this hysterical outbreak the authors pointed out that it seemed to display the characteristic pattern of hysteria as an escape mechanism—in this case an unconscious attempt by the first patient, Helen, to avoid an unpleasant situation. Helen did not know how to dance and was apparently somewhat fearful of learning, while at the same time the social events of the high school were compelling her to participate in this activity. The jerking of her leg muscles obviously made it impossible for her to dance, and so the painful conflict situation was resolved with no discredit to her. In addition, the attack brought her the attention and sympathy which she probably unconsciously desired, since the affections of a former admirer were being alienated by a vivacious freshman newcomer.

The second phase of the outbreak involved a number of other girls who were apparently unconsciously influenced by the repeated suggestion of the initial case and who were possibly rendered more suggestible by the strain and fatigue of social events of the preceding days and nights. Finally, the third phase involved the contribution of the more easily excited and less well-informed parents of the community, who, fearing that the malady was contagious and seriously dangerous, rushed to save their children from a fate not clearly understood and therefore all the more fearful.

DISSOCIATIVE REACTIONS

Dissociative reactions, often classified as one type of hysteria, include amnesia, fugue, multiple personality, and somnambulism. In each case, the patient successfully blocks off part of his life from conscious recognition. Although these conditions are closely interrelated and follow dynamic patterns similar to those of the conversion reactions, they merit separate consideration in some detail.

AMNESIA AND FUGUE. Amnesia is a partial or total inability to recall or identify past experience. It may occur in a psychoneurosis, in a psychosis, or in connection with any of a variety of organic conditions, including delirium, head injury, and diseases of the nervous system. Where the amnesia is based upon organic brain pathology, it is generally complicated by an actual failure of retention and registration: the material is truly lost. Psychogenic amnesia, on the other hand, is usually limited to a failure to recall—the "forgotten" material is still there beneath the level of consciousness, as becomes apparent under hyp-

nosis or in cases where the amnesia clears up As we have noted, amnesia is also common in reactions to intolerably traumatic experiences, such as those which occur under the combat conditions of warfare and the "shock" conditions of civilian life.

Symptoms. In the typical psychoneurotic amnesic reaction, the patient cannot remember his name, does not know how old he is or where he resides, and does not recognize his parents, relatives, or friends Yet his basic habit patterns, such as the ability to write, talk, and so on, remain intact, and he seems quite normal aside from the amnesia

In this amnesic state the individual may retreat still further from his problems by going away in what is called a "fugue state." A fugue reaction, as its name implies, is a defense by actual flight the patient wanders away from home, and then days, weeks, or sometimes even years later he suddenly finds himself in a strange place, not knowing how he got there and with complete amnesia for the period of the fugue His activities during the fugue may vary from merely going on a round of shows to traveling across the country, entering a new occupation, remarrying, or even starting a new business.

Dynamics. The pattern in hysterical amnesia is essentially the same as in conversion reactions except that instead of avoiding some unpleasant situation by getting sick the patient does it by forgetting (repressing) certain things Typically we find an egocentric, emotionally immature, highly suggestible personality who is faced with an acutely unpleasant situation from which he sees no escape There is usually a conscious impulse to run away from it all, but this solution is too cowardly to be accepted Eventually, however, the stress situation becomes so intolerable that large segments of the personality and even the stress situation itself are repressed, while more congenial patterns, including the impulse to run away, apparently carry on in a dissociated fugue state. In it the patient appears quite normal and is able to engage in quite complex activities, which are often of a wish-fulfilling or compensatory nature. This is shown in the following case

"Bernice L, a forty-two-year-old housewife was brought to the Clinics by her family, who stated that the patient had disappeared from her home four years previously, and had recently been identified and returned from R_____, a small town over a thousand miles away On rejoining her parents, husband and children she had at first appeared highly perturbed, anxious, and indecisive Soon, however, she had begun to insist that she really had never seen them before, that her name was not Bernice L— but Rose P— and that it was all a case of mistaken identity, further, she threatened that if she were not returned to her home in R_____ immediately, she would sue the hospital for conspiracy and illegal detainment. Under treatment, however, the patient slowly formed an adequate working rapport with the psychiatrist, consented to various ancillary anamnestic procedures such as amytal interviews and hypnosis, and eventually dissipated her amnesias sufficiently to furnish the following history.

"The patient was raised by fanatically religious parents, who despite their evangelical church work and moralistic pretenses, accused each other of infidelity so frequently that the patient often questioned her own legitimacy However, instead of divorcing each other, the parents had merely vented their mutual hostility upon the patient in a tyrannically prohibitive upbringing In the troubled loneliness of her early years the patient became deeply attached to her older sister, and together they found some security and comfort, unfortunately, this sister died when the patient was seventeen and left her depressed and unconsolable for over a year After this, at her parents' edict, the patient entered the University of A_____ and studied assiduously to prepare herself for missionary work However, during her second semester at the University, she was assigned to room with an attractive, warm-hearted and gifted girl, Rose P—, who gradually guided the patient to new interests, intro-

duced her to various friendships, and encouraged her to develop her neglected talent as a pianist. The patient became as devoted to her companion as she had formerly been to her sister, and was for a time relatively happy In her Junior year, however, Rose P— became engaged to a young dentist, and the couple would frequently take the patient with them on trips when a chaperone was necessary Unfortunately, the patient, too, fell 'madly in love' with her friend's fiancé, and spent days of doubt and remorse over her incompatible loves and jealousies The young man, however, paid little attention to his fiancé's shy, awkward and emotionally intense friend, married Rose P— and took her to live with him in Canada The patient reacted with a severe depression, the cause of which she refused to explain to her family, but at their insistence, she returned to the University, took her degree, and entered a final preparatory school for foreign missionaries.

"On completion of her work she entered into a loveless marriage with a man designated by her parents and spent six unhappy years in missionary outposts in Burma and China The couple, with their two children, then returned to the United States and settled in the parsonage of a small midwest town Her life as a minister's wife, however, gradually became less and less bearable as her husband became increasingly preoccupied with the affairs of his church, and as the many prohibitions of the village (e g , against movies, recreations, liberal opinions and even against secular music) began to stifle her with greater weight from year to year During this time the patient became increasingly prone to quiet, hazy reminiscences about the only relatively happy period she had known—her first two years in college with her friend, Rose P——and these years, in her day-dreaming gradually came to represent all possible contentment. Finally, when the patient was thirty-seven, the culmination of her disappointments came with the sickness and death of her younger and favorite child The next day the patient disappeared from home without explanation or trace, and her whereabouts, despite frantic search, remained unknown to her family for the next four years.

"Under treatment in the Clinics, the patient recollected that, after a dimly remembered journey by a devious route, she finally reached A——, the college town of her youth However, she had lost all conscious knowledge of her true identity and previous life, except that she thought her name was Rose P— Under this name she had begun to earn a living playing and teaching the piano, and was so rapidly successful that within two years she was the assistant director of a conservatory of music Intuitively, she chose friends who would not be curious about her past, which to her remained a mysterious blank, and thereby eventually established a new social identity which soon removed the need for introspections and ruminations Thus the patient lived for four years as though she were another person until the almost inevitable happened She was finally identified by a girlhood acquaintance who had known both her and the true Rose P— in their college years The patient at first sincerely and vigorously denied this identification, resisted her removal to Chicago, where her husband was now assigned, and failed to recognize either him or her family until her treatment in the Clinics penetrated her amnesia Fortunately, her husband proved unexpectedly understanding and cooperative, and the patient eventually readjusted to a fuller and more acceptable life under happily changed circumstances" (Masserman[11], pp 33-34)

In his analysis of this case, Masserman points out that the patient's behavior enabled her to flee from an intolerable mode of living as Mrs. Bernice L—, the unhappy wife, and to substitute an intensely desired way of living, personified by Rose P—, the loved and successful artist. Her "new personality" was in no sense completely novel, but represented an unconscious selection and integration of certain patterns of the old

It is interesting to note that a patient rarely if ever engages in activities which would have been morally incompatible with his pre-fugue personality Thus, in her identity as Rose P—,

the patient neither married again nor engaged in any direct sexual activity since "deep in her unconscious such unfaithfulness or bigamy would have been untenable" (Masserman[41], p 36) This is true, however, only in hysterical fugue reactions. In psychomotor epileptic attacks, there are conditions like fugue states but the patient may engage in homicidal and other criminal behavior which is morally incompatible with his normal personality and for which he is later amnesic The dynamics in these cases are entirely different and will be discussed in a later chapter.

MULTIPLE PERSONALITY. Dual and multiple personalities have received a great deal of attention and publicity in fiction and motion pictures Actually, however, they are rare in clinical practice Only slightly more than a hundred cases can be found all together in psychiatric records

Symptoms. Multiple personality is a dissociative reaction to stress in which the patient manifests two or more complete systems of personality. Each system has distinct, well-developed emotional and thought processes and represents a unique and relatively stable personality. The patient may change from one personality to another at periods varying from a few minutes to several years The personalities are usually dramatically different, one may be gay, carefree, and fun-loving, and another, quiet, studious, and serious

Various types of organization may exist between the different personalities Usually the patient alternates from one personality to the other, and cannot remember in one what happened in the other. Occasionally, however, while one personality is dominant and functions consciously, the other continues to function subconsciously and is referred to as a *co-conscious* personality In these cases the co-conscious personality is usually intimately aware of the thoughts of the conscious personality and of things going on in the world, but indicates its awareness through automatic writing or in some other roundabout way On the other hand, the conscious personality usually knows nothing of the co-conscious personality This relationship is illustrated in a case recorded by Erickson and Kubie[16] in which Miss Brown (the co-conscious personality) knew all about Miss Damon (the conscious personality) and her problems and assumed a protective role toward her Miss Damon, meanwhile, was completely unaware of the existence of Miss Brown

Where there are more than two personalities (five different and distinct personalities were found in the famous Beauchamp case by Morton Prince[56]), the relationships between them may become highly complicated. Some of the personalities may be mutually amnesic while others are only one-way amnesic

Dynamics. In a sense we are all multiple personalities in that we have many conflicting and warring tendencies, and frequently do things that surprise both ourselves and others This is illustrated by many common sayings, such as "I don't know why I did it" or "I didn't think he had it in him" It is also illustrated by the peculiar behavior many men indulge in at conventions when they are away from their families and associates and "cut loose" However, in pathological cases, the conflicting parts of the personality actually develop into far more autonomous and distinct personalities in their own right. Thus the dynamics in multiple personality are essentially the same as in amnesic and fugue reactions. It too is a dissociative reaction which represents an escape or flight from stress that is too severe.

The stress situation may be the patient's own unsatisfactory personality or unacceptable life situation Here the new personality represents a wish fulfillment In the following case this type of new personality was brought out in a classroom situation in a predisposed individual

" While a small group was discussing seminar reports in my office, I observed that a young woman was becoming somewhat drowsy. Without noticeably distracting attention from the

speaker, I commenced to play with my pencil. Shifting my chair to face the bored young woman, I began to turn the pencil over slowly. In a few moments she became somewhat more alert, but looked in a quizzical manner at the other members of the seminar group. When her glance included me, she seemed to be indifferent and perfunctory, as though I were a stranger. Suspecting that a personality alteration had taken place, I then called her by name and asked what topic she would prepare. The subject, however, paid no attention to me, other than a cursory look when I first spoke. Her name was called once more, but still she made no response. Then there ensued a rather unusual colloquy.

"Q. I was addressing you.

A. Oh, excuse me, I didn't hear you mention me.

Q. What is your name, if you please?

A. Why, I'm Helen Williams.

Q. Who am I, then?

A. Your face looks familiar, but I never saw you before, so far as I can recall.

Q. Do you know these people? *Here I referred to the members of the group seated about the table.*

A. No.

Q. What do you do?

A. I work in a bank here in F—— *She mentioned the name of a small Pennsylvania city where the subject herself lives.*

Q. By the way, where are we?

A. Why, in F——, of course. I seldom get away.

Q. Have you ever been to college?

A. No, I went to work in the bank as soon as I left high school. Mary has invited me down to dances, but I have never gone.

"These samples are indicative of the general tenor of a lengthy conversation. At length, *Helen* seemed to become a bit resentful that a group of apparent strangers should pose so many questions for her to answer. She spoke of her pride in being able to earn her own living and of her absence of regrets that she, unlike Mary, had no opportunity to attend college. Then she talked briefly about how college students become smug, learn to waste their time, and know nothing about the satisfactions of earning their own living. After these declarations, she refused to participate in any further discussion, but she made no attempt to leave the room. I now took the initiative and directed the discussion back to the term reports. When I had indirectly informed the group of my desire to take their attention away from the 'visitor,' I began to play with the pencil again. At length, I commenced to turn it in the reverse direction from that in which it had first been rotated.

"In a short while, Mary was once more in evidence as a drowsy, bored member of the group. Occasion was found to address a question to her, and she replied in a perfunctory manner. Suddenly she was asked, 'Who is Helen Williams?' 'How did you know about her!' was the immediate response. 'She is a girl I went to high school with, and now she is working at a bank at home. She's my best friend. When I am home at vacations, we are inseparable.' It was clear that her surprise was unfeigned and genuine. Private inquiry brought out the fact that she is somewhat envious of her friend's business success and economic independence. Frequently she identifies herself with Helen and wishes that she, too, were successful in employment. When she is bored by lecturers, she finds compensatory satisfactions in pleasant daydreams about living in her friend's place. It seems to be evident that the stimulus—reversal of the pencil—was adequate to elicit a remarkably vivid daydream on this occasion and that the role was completely acted out. Subsequently I have elicited *Helen* on numbers of occasions and have sustained the theory that *'Helen'* has a consistent personality, with a manner of speaking, writing, and behaving unlike that which is characteristic of Mary." (Harriman[27], pp. 183-184)

Sometimes the dissociation solves some deep-seated emotional conflict in which contradictory impulses and beliefs become separated from each other by elaboration into independent personality systems. In this way the patient is able to realize both systems of

behavior without the stress, conflict, and guilt that occurred when they were in contact As Murphy[51] puts it, "the main dynamics in most cases of double and multiple personality seems to be an exaggeration of a conflict situation which is present in nearly all of us, namely, a conflict between a conforming and a guilty non-conforming trend" (p. 443)

This dynamic pattern is well brought out in Lipton's[38] comprehensive and excellent analysis of the case of Sara and Maud K For present purposes the writer has taken the liberty of extracting certain portions from Lipton's record of this complex case

" in general demeanor, Maud was quite different from Sara She walked with a swinging, bouncing gait contrasted to Sara's sedate one While Sara was depressed, Maud was ebullient and happy, even though suicidal Suicide and death meant nothing to Maud, and she saw nothing wrong or depressing in them

". in so far as she could Maud dressed differently from Sara Sara had two pairs of slippers. One was a worn pair of plain gray mules, the other, gaudy, striped, high-heeled, open-toed sandals. Sara always wore the mules Maud would throw them aside in disgust and don the sandals Sara used no make-up Maud used a lot of rouge and lipstick, painted her fingernails and toenails deep red, and put a red ribbon in her hair She liked red and was quickly attracted by anything of that color Sara's favorite color was blue

"Sara was a mature, intelligent individual Her mental age was 19 2 years, I Q., 128 A psychometric done on Maud showed a mental age of 6 6, I Q., 43 Sara's vocabulary was larger than Maud's, and she took an intelligent interest in words new to her When Maud heard a new word, she would laugh and mispronounce it, or say, 'That was a twenty-five cent one' In sharp contrast to Sara, Maud's grammar was atrocious A typical statement was, 'I didn't do nuttin'.' Sara's handwriting was more mature than Maud's

"Sara did not smoke and was very awkward when she attempted it Maud had a compulsion to smoke At times she insisted she 'had to' and would become agitated and even violent if cigarettes were denied her She would smoke chain fashion as many cigarettes as were permitted but two would satisfy her for a while .

"Maud had no conscience, no sense of right and wrong. She saw no reason for not always doing as she pleased She felt no guilt over her incestuous and promiscuous sexual relationships. Sara on the other hand had marked guilt feelings over her previous immoral sexual behavior

"It seemed that Sara changed to Maud at the point when Sara's feeling of guilt was greatest" (pp 41-44)

Judging from the previous history of this patient, it would appear that the development of a dissociated personality in the form of Maud, had, among other things, enabled Sara to gratify her sexual desires by engaging in promiscuous sexual relations without conscious knowledge and hence without guilt feelings Apparently Sara reverted to Maud when her guilt feelings over her own previous promiscuous sexual behavior became too intense and self-devaluating

Further light is cast on Sara's background by the report of two of her previous high-school friends that "she was 'boy crazy' and was always chasing after some boy, often being rude to her girl friends, that she dyed her hair red, and that she smoked and used Listerine to deceive her mother about smoking. Sara denied all this but Maud readily recalled it." (Lipton[38], p 47) It is interesting to note that this patient later became psychotic, apparently as a result of the failure of the dissociative reaction to solve satisfactorily her inner conflicts

Because multiple personalities can be induced experimentally, the question has been raised as to whether perhaps all cases are only artificial creations produced inadvertently by the therapist This seems extremely unlikely, although undoubtedly some of the cases re-

ported would fall in this category In the case of Helen Williams the role was apparently already present, although it might not have found expression had Harriman not evoked it

Taylor and Martin[60] have pointed out that a therapist who is concerned with multiple personality as a symptom pattern, and who actively seeks out his patient's conflicting personality trends—especially through hypnosis or through automatic writing—will probably discover many multiple personalities, whereas a therapist who is not concerned with multiple personality and devotes his therapeutic efforts to working through the patient's problems in the direction of integrating his personality will discover few if any cases of multiple personality

SOMNAMBULISM Somnambulism is another neurotic dissociative reaction in which the ideas blocked off from consciousness are strong enough to determine the patient's behavior, though only during sleep The episodes may occur nightly or only irregularly. They are most common in adolescence, but apparently are much more frequent in adult life than is generally realized. Jenness and Jorgensen[43] report that 5 per cent of a group of 1808 college freshmen admitted walking during sleep

Symptoms. The patient usually goes to sleep in a normal manner, but sometime during the night arises and carries out some act. This may take him to another room in the house or even outside, and may involve rather complex activities He finally returns to his bed and to sleep and in the morning remembers nothing that has taken place During the sleepwalking the patient's eyes are usually partially or fully open, he avoids obstacles, hears when spoken to, and ordinarily responds to commands such as to return to bed Shouting or shaking the patient will usually awaken him, and he will be surprised and perplexed at finding himself in his present strange and unexpected position.

Contrary to popular opinion, many sleepwalkers injure themselves, sometimes quite seriously, as a result of activities they undertake in their sleep In one case the patient was struck by a car while crossing the street in front of her home There is also a popular belief that it is dangerous to awaken a sleepwalker. There is no evidence for this belief, unless, of course, violent measures are used which unduly startle him.

These patients usually evidence other neurotic symptoms. Sandler[62] reports that in his study of 22 successive cases of somnambulism occurring in the armed forces, 18 had been referred for psychiatric attention because of somatic complaints rather than because of their somnambulism

Dynamics. Somnambulism occurring during puberty and adolescence is frequently related to severe traumatic experiences which lead to insecurity and self-devaluation. Occasionally guilt and conflict centering around masturbatory activities result in insecurity, self-devaluation, and fears of rejection The precise relation of the sleepwalking to the conflict situation is usually of a symbolic nature, often apparently signifying escape

Adult somnambulism also represents an escape, although the precipitating factors may be different Sandler[62] reports in his study that the precipitating cause was usually some traumatic experience that had just occurred or was expected in the very near future. The somnambulism represented to the patient an attempt to escape from threatened danger.

Sometimes in somnambulism the patient attempts to carry out during sleep desires which are effectively suppressed or repressed from consciousness during the waking state For example, in one case the patient would arise, walk to her mother's bedroom, and kiss her on the cheek and then return to her own room. It was found here that the patient and her mother had had a serious quarrel and, even though they had lived in the same house, had not spoken to each other for some four months The sleepwalking apparently represented the patient's suppressed desire for an exchange of affection with her mother

lity structure of the adult som-
usually that of the typical hys-
nature, egocentric, overly sug-
dual with exaggerated needs for
oval, and security Hence treat-
be limited to symptoms only
cure, the patient must be helped
urity and confidence in his own
worth

for dissociative reactions. Treat-
three types of dissociative reac-
tially the same as for conversion
any amnesias clear up following
questioning, free association, hyp-
analysis, and narcosis methods.
and Langenstrass[73] emphasize
nned interrogation under favor-
stances frequently initiates the
ne recovery of lost memories In
sias the recovery is, of course,
In a few instances shock therapy
has proved successful, although it
to be considered a rather severe
treatment for hysterical disorders

found the use of sodium amytal
helpful in treatment because it al-
herapist to deal with the repressed,
material In one case the reduction
lking was from an average of five
eek to only once during a three-
iod. But the need for extensive psy-
in more chronic cases is empha-
the fact that the sleepwalking
ere often replaced by anxiety, hypo-
l, and other neurotic symptoms

: REACTION

ic reaction is a persistent fear of
ect or situation which presents no
ger to the patient or in which the
magnified out of all proportion to
seriousness The following list of
non phobias and their objects will
e hint of the wide variety of situa-
l objects around which phobias may
ed·

Acrophobia	high places
Agoraphobia	open places
Algophobia	pain
Astraphobia	storms, thunder, and lightning
Claustrophobia	closed places
Hematophobia	blood
Mysophobia	contamination or germs
Monophobia	being alone
Nyctophobia	darkness
Ocholophobia	crowds
Pathophobia	disease
Pyrophobia	fire
Syphilophobia	syphilis
Zoophobia	animals or some particular animal

Symptoms. Most of us have minor irrational fears, but in phobic reactions such fears are more intense and interfere with the everyday activities of the patient For example, a patient with claustrophobia may go to great lengths to avoid entering a small room or passageway, even when it is essential for him to do so Patients usually admit that they have no real cause to be afraid of the object or situation but say they cannot help themselves. If they fail to give in to the fear and do not avoid the phobic situation, they are overcome with anxiety, which may vary from mild feelings of uneasiness and distress to a full-fledged anxiety attack.

Phobic patients usually show other neurotic symptoms in addition to their phobias, such as headaches, back pains, stomach upsets, dizzy spells, feelings of inferiority, and so on. In some cases phobic reactions may also be obsessive in nature, as when the patient has a persistent obsessive fear of contamination which dominates his consciousness. Fears of this type will be considered in the next section under "obsessive-compulsive" reactions.

Dynamics. Phobic reactions occur as part of many symptom syndromes; hence, an understanding of their various dynamic origins is helpful in diagnosis and treatment of many kinds of psychopathology Phobias are essentially attempts to cope with internal or ex-

ternal dangers by carefully avoiding them or by preventing their occurrence. Thus, phobias are considered simple defense reactions. The patient *has* to maintain and give in to them, because if he does not, the threat will return, and with it the anxiety

1. A phobia may develop out of a simple conditioned fear reaction In such cases as this, the patient may not be neurotic but may have acquired phobic fears from traumatic experiences or from undesirable examples set by phobic parents A mother who becomes terror-stricken at the sight of spiders and bugs may communicate these fears to her children. One patient with astraphobia traced his fear to a phobic mother who would take him into an inner room of the house when a storm was approaching and cower in terror each time a clap of thunder was heard

A phobic reaction resulting from a single traumatic experience is illustrated by an eighteen-year-old college girl who complained of an extreme fear of dogs She realized the fear was silly, but when a dog approached she would become panic-stricken, her heart would pound, she would tremble and feel faint, and look around frantically for a place of refuge Strangely enough, however, she was afraid to move or run away for fear she would attract the dog's attention and he would follow her Questioning revealed that when a child of about eight, she had been attacked and painfully bitten by a vicious dog The details of this incident were not clearly recalled, but she remembered that she was "terribly frightened and screamed" until rescued by a neighbor Although many years had intervened and the details of the traumatic experience had been partially forgotten, the fear of dogs persisted.

Most of us probably have mild phobias based upon trauma, partially or wholly forgotten. Many people, for example, experience a feeling of dislike and vague uneasiness in connection with a particular name or certain physical characteristics, such as close-set eyes In one such instance the author found that a patient's dislike of the name Bruce related to an early childhood experience with the local bully, whose name was Bruce Ordinarily such fears can be traced by means of careful questioning, free association, dream analysis, and hypnosis or narcosis interviews

Occasionally, through a process of irradiation or symbolic spread, fears arising out of traumatic incidents will become attached to somewhat remote situations A patient who has been bitten by a vicious dog may manifest a phobic fear not only of dogs, but also of cats, rabbits, and even birds There may be anxiety even at a well-protected zoo or when any small animal is shown on a motion-picture screen. A survivor of the Cocoanut Grove disaster who developed pyrophobia lived in constant fear of another fire and did not dare go to a night club again He would attend a movie only if there was a seat in the last row so that he could get out quickly in case of fire (Adler[1])

Masserman[41] cites a case involving more extreme symbolic spread in which the patient had such a phobia of tall buildings—which to him were unconsciously symbolic of his father's threatening power and authority—that he could not walk about in the Chicago Loop district unless accompanied by a protective father-surrogate, such as a male nurse or physician

2. More commonly, however, phobic reactions represent an actual displacement of the anxiety to some symbolic object or idea to the extent that the patient is completely unaware of the real source of his anxiety and fear

A young man had started his first business venture by renting a very small store near the entrance to a large building and stocking it exclusively with neckties He managed to make ends meet over a trial period of several months, but it was becoming obvious that his business venture was doomed to failure About this time he noticed that the shop "seemed stuffy," that he didn't have any "elbow room" It seemed as if the walls were closing in on him, and he would

multiplied and her entire life became "one mass of anguish" (Adapted from Kraines[30], p 59)

The defensive nature of the phobias in the above case is quite apparent They protected the patient from situations in which her erotic impulses might break through

Not infrequently, syphilophobia originates out of a similar dynamic pattern The patient may displace his fear of indulging in immoral behavior to a fear of syphilis, which is a specific neurotic fear that assists him in maintaining sexually moral behavior Here again the phobias are in the nature of reaction formations which help the patient to control his own dangerous internal impulses.

4. Phobias may grow out of feelings of guilt and anticipated punishment. As we have noted, such feelings may greatly increase one's reaction sensitivity and the patient may live in continual fear and apprehension It is not uncommon for certain types of predisposed personalities who have been rigidly trained in sex morals to develop syphilophobia or mysophobia after engaging in what is to them completely unacceptable sexual behavior If the conflict is long sustained and the sexual behavior a part of a longer picture of neurotic maladjustment, such fears may become obsessive.

As with the other neurotic reactions already discussed, phobias may lead to various secondary gains, such as increased attention, sympathy, and assistance, or being able to dominate the behavior of others (Fenichel[18]) If the patient does not want to go on a mountain trip, he may carefully point out that he has acrophobia, or if he wants not to see a particular movie, he will discover from reviews he has read or from other sources that this particular picture contains many scenes which would activate his phobia In many cases, of course, the patient is ridiculed for his apparently silly fears and finds social disapproval complicating his already difficult adjustment situation

Treatment. The kind of treatment de-

pends upon the particular dynamic pattern underlying the phobia If the phobic reaction is the result of a severe traumatic experience, therapy usually involves a program of desensitization and re-education, in which the individual is reassured and encouraged to enter into the phobic situation either alone or with someone in whom he has a great deal of confidence This procedure is repeated until the phobic reaction to this particular situation has been dissipated The proper handling of fears immediately after the traumatic experience can, of course, do much to prevent the development of actual phobias of this type.

Where the phobic reactions represent a symbolic displacement of anxiety centering around external or internal dangers, there is ordinarily a more widespread pattern of personality maladjustment Essentially the patient is being passive and submissive instead of attempting to cope with his problem on a more active and aggressive plane. Such patients usually need rather intensive therapy to acquire insight and reintegrate their personalities for better adjustment

OBSESSIVE-COMPULSIVE REACTIONS

In obsessive-compulsive reactions, as with phobias, the patient recognizes the irrationality of his behavior, but seems compelled to think about something that he wishes not to think about or to carry out actions that he does not want to carry out These irrational obsessive and compulsive reactions are many and varied; next to anxiety reactions they are probably the most common of the various psychoneurotic disorders.

It may help to clarify the underlying dynamics if we consider the obsessive and the compulsive components separately, although we must not lose sight of the fact that they both form part of a total reaction pattern Either the obsessive or the compulsive pattern may predominate, but in general the obsessive thought leads to the compulsive action

Obsessive reaction. Most of us have experienced thoughts of a somewhat obsessional nature, such as persistent thoughts about a coming trip or date, or a haunting melody that we cannot seem to get out of our mind In the case of obsessive reactions, however, the thoughts are much more persistent, appear irrational to the patient, and interfere with his everyday behavior

Obsessive thoughts may center around a wide variety of topics, from concern over bodily functions to suicide, or to the solution of some scientific problem Particularly common are obsessive fears of uncontrollable impulses The patient may fear that he is going to shout some obscene word, or a father may have the obsessive idea of bashing in his son's head with a hammer, a wife of stabbing or poisoning her husband, a daughter of pushing her mother down a flight of stairs Many times the thoughts are in the nature of fant[illegible] action on the p[illegible] may find himself persistently wishing that his mother would die. To the patient such thoughts may appear not only irrational but also immoral, disgusting, or horrifying

These obsessive thoughts usually begin with occasional ruminations which can at first be easily dismissed from the mind Even at this stage the patient may experience some anxiety at the immoral or antisocial nature of the thoughts and may make a determined effort to get rid of them But they continue to recur, and the more desperately he tries to rid himself of them the greater their persistence.

Even though obsessive ideas are not carried out in action, they remain a source of torment to the patient Ofttimes the patient feels that he is going insane or that he is not fit to live. This pattern is well illustrated in the case of a young lady who

"complained of having 'terrible thoughts' When she thought of her boy-friend she wished he were dead, when her mother went down the stairs, she 'wished she'd fall and break her neck', when her sister spoke of going to the beach with her infant daughter, the patient 'hoped that they

uld both drown' These thoughts 'make me sterical I love them, why should I wish such rible things to happen It drives me wild, kes me feel I'm crazy and don't belong to iety; maybe it's best for me to end it all than go on thinking such terrible things about ose I love'" (Kraines[36], p 183)

Obsessive reactions represent any of a number of dynamic patterns·

1. Obsessive thinking of certain thoughts may be serving the purpose of keeping other, more unpleasant, thoughts out of consciousness Here the obsessive thoughts represent the channeling of unconscious impulses into less dangerous ideas or activities An individual walking in a lonely place at night might find the following thought continually persisting in his mind "There is nothing to be afraid of—I am not afraid" In this way fear is kept out of his consciousness.

The same dynamic pattern may underlie obsessive preoccupation with working out new inventions, complex philosophical systems, or a sure system to beat the horses The system may never be perfected, but by working on it so hard, the patient is kept too busy to deal with various unpleasant life problems.

2. Obsessive thoughts may represent the break-through into consciousness of hostile or erotic wishes, but with the affective charge cut off.

A farmer developed obsessive thoughts of hitting his three-year-old son over the head with a hammer The patient was completely unable to explain his "horrible thoughts." He stated that he loved his son very much and thought that he must be going insane to harbor thoughts of killing him Analysis of this case revealed that the patient's wife had suffered great pain in childbirth and had since refused sexual relations with the patient for fear of again becoming pregnant In addition, she lavished most of her attention on the son, and their previously happy marriage was now torn with quarreling and bickering.

This patient's obsessive thoughts of violence toward his son had apparently developed out of a combination of repressed hostility toward the son, who had replaced him in his wife's affection, and wishful thinking in the direction of a return to their previously happy marital state, once the son was out of the way. However, the wish-fulfillment element here was apparently unconscious, as evidenced by the fact that the patient vigorously and sincerely denied it when it was suggested to him He was able to tolerate his obsessive fantasies only because the affective element underlying them was cut off or isolated Thus, although the obsessive fantasy entered consciousness, its real wish-fulfillment nature was disguised so that it appeared to the patient as something alien and not really as his wish at all

3. In a similar but slightly more complicated dynamic pattern, the obsessive thought may represent reaction formations to dangerous erotic or aggressive impulses

"A successful executive who, for various reasons, hated the responsibility of marriage and fatherhood, was obsessed many times a day with the idea that his two children were 'somehow in danger,' although he knew them to be safe in a well-run private day-school to which he himself brought them every morning As a result, he felt impelled to interrupt his office routine thrice daily by personal calls to the school principal who, incidentally, after several months began to question the sincerity of the patient's fatherly solicitude Similarly, the patient could not return home at night without misgivings unless he brought some small present to his wife and children, although, significantly, it was almost always something they did not want" (Masserman[41], p 43)

Here the patient defended himself against his own repressed hostility and aggressive impulses toward his family by developing obsessive fears concerning their safety

In general, the development of obsessive reactions in cases such as the above indicates the threatened breakdown of repression—that

is, the repressed hostile and aggressive impulses are in danger of breaking through into consciousness and possibly into overt behavior As a defense against this threat the patient develops contradictory obsessive thoughts and contradictory compulsive behavior.

4. Obsessive reactions may grow out of feelings of guilt and self-condemnation over ethically unacceptable desires or forbidden behavior In such cases there is usually considerable fear of possible punishment for the unforgivable thoughts or behavior The resulting obsessive thoughts usually reveal considerable self-devaluation, as well as symbolic attempts toward expiation and atonement.

A thirty-two-year-old high-school cooking teacher developed marked feelings of guilt and uneasiness, accompanied by obsessive fears of hurting others by touching them or by their handling something she had touched She dreaded to have anyone eat anything she had prepared, and if students in her cooking class were absent she was certain they had been poisoned by her cooking In addition, she developed the obsessive notion that a rash at the base of her scalp was a manifestation of syphilis, which would gnaw at her brain and make a "drooling idiot" of her

Accompanying the obsessive fears were compulsions consisting primarily in repeated handwashings and frequent returns to some act already performed to reassure herself that the act had been done right, such as turning off the gas or water

Analysis of this case revealed that the patient was a self-centered but highly sensitive and conscientious person She had graduated from college with high honors and considered herself highly intelligent. About three years before her present difficulties she had married a non-college man of whom she had been very much ashamed because of his poor English, table manners, and other characteristics which she thought led to a very poor social showing As a result she had rejected him in her thinking and behavior and had treated him in what she now considered a very cruel manner. On one occasion she had also been unfaithful to him, which was very much against her moral training

Over a period of time, however, she came to realize he was a very fine person and that other people thought highly of him despite his lack of social "polish." In addition, she gradually came to the realization that she was very much in love with him At this point she began to reproach herself for her cruel treatment of him. She felt that he was a truly wonderful husband, and that she was completely unworthy of him. She was sure her past cruelty and unfaithfulness could never be forgiven "Heaven knows that every word he says is worth fifty words I say If I were real honest and truthful I would tell my husband to leave me"

In this case the patient's obsessive fears of contaminating others and of having syphilis apparently grew out of intense guilt feelings, self-devaluation, and fear of punishment as a result of her unethical behavior These obsessive fears were also augmented by and designed to protect her from occasional returns of her forbidden sexual desires for relations with other men The subsequent handwashing compulsion symbolically represented her attempt to "cleanse" herself of both her past and present sins and to make herself worthy of her husband

5. Finally, obsessive reactions may be the only way the patient can protect himself from a dangerous and threatening world Such patients may become unduly meticulous and methodical Only by keeping everything in precise order can they possibly hope to adjust satisfactorily. If anything gets out of order, the situation becomes too complicated, and they feel threatened and anxious.

A case which illustrates this pattern is that of a patient who, prior to hospitalization, had his life ordered in the most minute detail. He arose in the morning precisely at 6 50, took a shower, shaved, and dressed. His wife had breakfast ready precisely at 7 10 and followed a menu which he worked out months in advance At

actly 7·45 he left for the office where he orked as an accountant He came home precisely at 5 55, washed and read the evening paper, and had dinner precisely at 6 30 again as er menu His schedule was equally well worked ut for evenings and weekends, with a movie n Tuesday, reading on Wednesday, rest on Monday and Thursday, and bridge on Friday Saturday morning he played golf and Sunday morning and evening he attended church Saturday evening usually involved having guests or isiting others He was fastidious in his dress Each shirt had to be clean and unwrinkled, his uit pressed every two days, and so on His demands, of course, also included his wife, who was inclined to be easy-going and was upset when he "blew up" at the smallest variation from established routine.

By means of his carefully ordered existence the patient managed to make a reasonably successful adjustment until he became involved in a business deal with a friend and lost a considerable sum of money. This proved too much for him and precipitated a severe anxiety reaction with considerable agitation and depression necessitating hospitalization.

Compulsive behavior. In compulsive reactions the patient feels compelled to perform some act which, even during the process, seems absurd and strange to him Yet the performance of the compulsive act usually brings a feeling of satisfaction, whereas if he tries to restrain the compulsion, he is overcome with anxiety and a feeling of tension

Most of us evidence some compulsive behavior, such as touching fence posts, stepping over the cracks in sidewalks, doodling while phoning, walking around ladders instead of under them, or turning away when a black cat walks in front of us But in neurotic compulsive reactions proper, the compulsive acts are much more persistent, appear completely absurd to the patient, and may seriously disrupt his everyday behavior One patient, for example, found it necessary to wash herself as often as fifty times a day

Compulsive acts may vary from relatively mild, tic-like rituals, such as running the finger around under the collar, licking the lips, or hunching the shoulders, to highly complicated ritualistic acts such as tying one's tie exactly seven different times before feeling satisfied Typically such rituals center around everyday activities such as washing, dressing, and eating Strecker[98] cites the case of a man who spent three hours at night carefully arranging all the items of clothing that were to be worn the next morning

Here again various dynamic patterns are found

1. Mild forms of compulsive behavior such as licking one's lips or hunching one's shoulders usually occur when the individual is under stress and represent a learned means of tension reduction Public speakers often show mild compulsive reactions which are not characteristic of their behavior when in a more secure situation.

2. In more severe cases compulsions occur as defensive reactions to obsessive thoughts and fears As we have noted, feelings of guilt over immoral sexual behavior may lead to obsessive thoughts concerning possible contamination and punishment and subsequently to handwashing and other compulsive behavior Unfortunately, sex, dirt, and guilt are popularly closely associated, and patients are usually much better indoctrinated in the sinfulness of sex than in accurate information concerning it Thus, it is not surprising that so often they attempt to "cleanse" themselves of guilt by washing

Below is the case of a fourteen-year-old boy whose behavior was interpreted as symbolic of an attempt to rid himself of an obsessive sense of guilt by compulsive cleanliness

" . This boy's excessive cleanliness first showed itself at the age of thirteen, when it was noticed that he washed his hands many times during the day Later he began to bathe frequently Frequently he stayed two or three hours in the bathtub On a number of occasions he

daubed iodine on his hands and face. He told his parents that he had scratched himself and wanted to prevent infection. In addition to [illegible] a boric acid solution to wash his eyes every evening. The parents stated that he refused to play ordinary games with other children because he did not want to soil his hands. When asked to explain his concern regarding cleanliness, he stated that he realized that he washed more than other boys, but that in his case there were real reasons. He believed that his skin was of such a texture that it retained dirt and germs, and he therefore was forced to wash and scrub himself.

"No amount of persuasion was successful in deterring the boy from this until his original conflicts began to be solved. He stated that he had been greatly worried about his guilt regarding his previous activities with other boys. His parents discovered that he took part in sex play and punished him. They had frequently lectured him on the evils of 'immoral' behavior and on one occasion, when he was nine, made him sign a pledge never to smoke or drink even beer. They also told him how some terrible diseases result from masturbation. He stated that he had 'sworn off' masturbating on many occasions, and after each time he masturbated he felt thoroughly ashamed of himself. He also believed that he was deficient in character and will-power because he could not stop. He stated, 'I know it's a dirty habit and if anyone finds me out they will think terrible things about me.' After many interviews and much discussion, he began to change his attitude regarding the immorality of his past behavior and the possible consequences of his supposed moral transgressions. His excessive cleanliness gradually decreased and he was able to take part in the activities of other boys without feelings of unpleasantness from soiling his hands and clothes." (Sherman[65], pp. 226, 227)

In a similar way, obsessive thoughts of killing someone the patient avowedly loves may lead to compulsive behavior as a means of counteracting these thoughts. [illegible] the threatening impulses may be repressed so that the patient does not evidence any obsessive patterns at all but only the compulsive defensive reaction. In one case a young mother's hostile feelings toward her daughter were so acutely traumatic that they were repressed. However, this repression was an extremely precarious defense, and the dangerous hostility was continually threatening to break through. As a result, the patient unconsciously developed a compulsive defensive reaction: at crucial moments she felt compelled to make the sign of the cross, repeating "God protect my dearly beloved little daughter." Yet she had not the vaguest idea why she had to say it. It seemed senseless and silly to her.

In the following case the displaced hostility is clearly apparent.

"The patient had a need to make certain that all doors through which he passed were closed, and to his great annoyance he had to return several times to make sure that they were not open. Regression and reorientation* to a five year level revealed an experience that apparently was the basis for this symptom. Shortly after the patient's fifth birthday, his younger brother smashed a toy that he especially treasured. He was filled with rage so intense that it caused him to tremble. Instead of attacking his brother, however, he turned around and fled to his room, slamming the door shut as if to separate himself from his sibling. Thereafter, whenever he felt hostile toward his brother, he found himself slamming doors, an act that soon became compulsive, as though it served to neutralize his hostility. The patient's recitation of the original experience was accompanied by strong emotional feelings, by anger, weeping, and pounding of his fists against the desk. He was enjoined to remember the original experience when he awakened. The door-slamming compulsion vanished from that day on." (Wolberg[76], pp. 230-231)

* "Regression and reorientation" here refers to a type of therapy in which, under hypnosis, the patient is told to regress to an age preceding the onset of his symptoms. This will be more fully discussed in Chapter 13.

3. Occasionally the compulsive acts may be unconsciously symbolic of some severe traumatic experience Masserman[41] cites the case of a soldier who in an acutely neurotic fugue state kept throwing out his arms in a peculiar gesture This gesture could not be explained until the patient recalled under narcosis that in the heat and excitement of a night battle, he had machine-gunned a friend, and had suffered a remorse so great that he had had an overpowering desire to throw away his gun and run blindly from the unbearable horror of the situation

4. Sometimes compulsive reactions seem to represent the only way out of a catastrophic situation.

A college girl was engaged to a Naval officer After returning from several months in the South Pacific, he broke off the engagement on the grounds that she had been unfaithful to him while he was gone Her tears and violent protestations of innocence were of no avail—he was firmly convinced she had been unfaithful

The patient was "terribly in love" with him, had centered all her future hopes and plans around him, and felt that she could not live without him Consequently, in desperation she went around to her friends and acquaintances requesting that they talk to her fiancé and substantiate her innocence She even had some of them make out affidavits to the same effect. She considered her actions somewhat peculiar and inappropriate but told them that "it seems to be the only thing I can do" Despite all of this evidence, however, her fiancé refused to believe in her At this point the patient came to the author to ask him how she might better prove her faithfulness She was sure that she must have overlooked something—that there must be some way to convince him

The possibility that her fiancé was using this as a subterfuge to break off their engagement she could not admit, for such an admission would leave her face to face with a catastrophic situation—the irrevocable loss of her fiancé and the crumbling of all her hopes and plans Consequently, she compulsively held onto this one possible solution to her problem—to prove her innocence to his satisfaction The only alternative was catastrophic stress and a complete breakdown, which in fact took place when subsequent events finally forced her to the realization that her task was hopeless and that she had lost her fiancé to another girl.

5. Finally, the compulsive following of a rigid order or pattern, particularly a socially desirable and ethical one, apparently tends to establish automatic controls which protect the patient from any possible moral or ethical lapse he simply allows himself no opportunity for the expression of such dangerous impulses For example, an exhausting schedule of daily activities and the rigid adherence to conditions which make sexual behavior impossible may protect the individual from any immoral impulses in that direction

General dynamics of obsessive-compulsive reactions. We are now in a position to see the relation of both the obsessive and the compulsive components to the whole picture and to the type of personality which utilizes this particular neurotic defense

In understanding this general reaction pattern, it may be helpful to note that most of us resort to minor obsessive-compulsive patterns in our competitive efforts to achieve status and success in our highly complex world In fact, there have been many famous figures whose "obsessive" adherence to their goals has been of great historical importance and benefit to society Despite discouragement and ridicule, Columbus persisted for some eighteen years in his efforts to secure financial backing for his expedition to "India." In most cases, however, obsessive-compulsive reactions are considered faulty adjustive techniques because their effectiveness is transient at best; more often they are useless or maladjustive Also they make for rigidity and distortion of the patient's personality.

In general personality make-up, these patients are usually rigid, methodical, stubborn

in their convictions, and highly conscientious.* Typically they are nonsuggestible, introverted, and highly orthodox in behavior. They feel highly insecure and inadequate and evaluate the world as an extremely dangerous and threatening place. Yet despite their insecurity and fear, their goals and standards are very high.

With their extreme rigidity, their only means of defense is to try to make the world predictable and hence safer by getting everything carefully ordered and under control so that nothing can go wrong. As Goldstein[22] has demonstrated in the case of brain-injured patients, a compulsive and careful ordering of the world enables a handicapped individual to make some sort of an adjustment rather than being overwhelmed by the world's complexities and dangers. The more careful and precise the order, the less likely is there to be a slip-up. And the greater the degree of threat and consequently of aroused anxiety, the more likely is a repetitive, obsessive-compulsive pattern to become "fixed" or "frozen."

Now anything that might threaten this order is viewed as a serious menace. Any decision that has to be made is a possible threat to the orderly structure and leads to a vacillation and uneasiness, for the patient cannot afford to make a wrong decision that might upset his carefully ordered apple cart. Indecision and worry typically follow a decision for fear it may have been a mistake. It is similar to a threatened failure of any detail in a well-planned military operation, in which the failure would threaten the entire operation.

In many cases the obsessive-compulsive defenses take the form of semi-magical signs or rituals. These are part of the ordering of a hostile world and are probably comparable to the repetitive and rigid rituals long used by primitives as a means of warding off evil forces and insuring the cooperation and friendship of supernatural powers (Homans[illegible]). If they are to be effective, such rituals must be faithfully observed and must be performed in rigidly prescribed ways.

Even in our educational, legal, and other professional fields various rituals such as the cap-and-gown graduation ceremony are rigidly adhered to even though the reasons for their development are long since lost in antiquity. Such ritual apparently lends significance, stability, security, and some measure of omnipotence to our behavior (Wilson[75]). Even such a simple act as knocking on wood after bragging is a ritual designed to ward off bad luck. We know these acts are foolish, yet if we fail to perform them we feel vaguely uneasy and apprehensive.

Likewise, any internal impulses which are out of the ordinary or which are contradictory to the patient's high ideals and overly developed conscience (aggressive hostility, improper sexual impulses, and so on) are perceived as a serious threat to his carefully ordered world. Consequently, the patient tries desperately to suppress these impulses, but in so doing a strange paradox develops. The more he tries to suppress them the more they return to haunt him, partly because of the immediate threat which they present to his precariously structured world and partly because of the emotional motive power of sex, guilt, or pent-up hostility. The whole situation is aggravated too by the patient's overly developed conscience. he exaggerates the seriousness of the most minor unethical impulses and actions, which everyone experiences sometimes but which most people handle easily and do not take so seriously.

The patient tries to defend himself against these internally threatening impulses in four major ways:

1. By persistently thinking of something else each time threatening thoughts or impulses make their appearance. This leads to the development of the "safe" obsessive thoughts, like repeating "I am not afraid." Thus the existence of the internal danger may

* This overconscientiousness often leads to depressive reactions when such individuals are promoted to more responsible positions which they fear they are not able to handle as efficiently as they should (Flanagan[20]).

be manifested in displaced form in various apparently irrational or silly but harmless obsessive thoughts and repetitive activities

2. By the development of obsessive fears which help to maintain inner control, such as an unreasonably strong fear of syphilis, in the case of immoral sexual impulses

3 By compulsively ordering life activities in a rigid pattern which is obsessively followed and protects the individual from both internal and external threats.

4 By the development of compulsive acts designed to counteract or undo forbidden thoughts and desires Several examples have been cited in the preceding pages

Thus obsessive-compulsive reactions are essentially defenses which protect one against internal and external dangers by rigidity, substitutive activities, and counteracting fears and compulsions And even though the hostile, sexual, and other dangerous desires sometimes do manage to enter consciousness, they are cut off from their affective base, and however injurious they are to the individual's mental health, they are safely contained and are not carried out in antisocial action.

NEUROTIC DEPRESSIVE REACTION

In the neurotic depressive reactions, the patient reacts to some distressing stress situation with more than the usual amount of sadness and dejection and often fails to return to normal after a reasonable period of time A neurotic depression ordinarily clears up after a relatively brief period but may last for days or even months

The term *neurotic depressive reaction* is synonymous with *reactive depression* and is to be distinguished from the depressions in both involutional melancholia and manic-depressive reactions, which are much more severe both in degree and in duration. Both of these disorders will be discussed later

Symptoms. The general appearance of the patient is one of dejection, discouragement, and sadness. His facial expression may be extremely sorrowful or merely dull or masklike. He tends to sit alone, hopelessly staring into space and unable to see any but the dark side of life He usually complains of difficulty in concentrating, although his actual thought processes are not slowed up During the night he may awaken and be unable to go back to sleep, or he may complain of restlessness and difficulty in going to sleep initially. Often he complains of inner tension, feelings of restlessness, and vague hostility

The following is typical of a conversation with a neurotic depressive and will illustrate the characteristic feeling tone

Pt Well you see, doctor, I just don't concentrate good, I mean, I can't play cards or even care to talk on the phone, I just feel so upset and miserable, it's just sorta as if I don't care anymore about anything

Dr You feel that your condition is primarily due to your divorce proceedings?

Pt Well, doctor, the thing that upset me so, we had accumulated a little bit through my efforts—bonds and money—and he (sigh) wanted one-half of it He said he was going to San Francisco and get a job and send me enough money for my support So (sigh) I gave him a bond, and he went and turned around and went to an attorney and sued me for a divorce Well, somehow, I had withstood all the humiliation of his drinking and not coming home at night and not knowing where he was, but *he* turned and divorced me and this is something that I just can't take I mean, he has broken my health and broken everything, and I've been nothing but good to him. I just can't take it doctor There are just certain things that people, I don't know —just can't accept. I just can't accept that he would turn on me that way

Dynamics. All of us have the blues sometimes and may become greatly depressed at the death of a loved one, a disappointment in love, an accident, some occupational setback, or feelings of guilt concerning failure or unethical desires or behavior Neurotic depressive reactions are precipitated by similar situations, but occur in a personality al-

ready predisposed to marked feelings of inferiority and inadequacy and to an evaluation of the world as a hostile, threatening place There is usually hypersensitivity to even ordinary swings in mood; when additional stress comes, it tends to overwhelm such an already precariously adjusted individual. So it is no wonder that the neurotic depressive reaction is considerably more severe and persistent than depression in the average person.

In addition, the dynamic pattern is often complicated by repressed hostility, ambivalent feelings, and guilt. For example, the patient may feel both sadness over the loss of a loved one, and at the same time guilt because of hostility toward the deceased Or he may feel he was to blame for the death, as for example in an automobile accident, and be unable to cope with the resulting feelings of guilt and self-condemnation In such cases the degree of the depression is largely determined by the intensity of such ambivalent or guilt feelings toward the loss

Neurotic depressives often use their symptoms to force support and sympathy from others for their predicament A patient telephoned her therapist and told him that she was going to commit suicide Special precautions were taken, although the patient made no serious effort of a suicidal nature. In a later therapeutic session, the therapist asked the patient why she had called him and threatened suicide The patient explained that she thought the doctor was not taking her symptoms and hopeless situation seriously enough and was not showing proper sympathy and appreciation for her desperate plight By her threat of suicide she hoped to make him realize that he "just had to do something for her immediately"

Treatment. Because there *is* a real possibility of suicide, these patients are often hospitalized and given electro-shock therapy, which seems to be a near specific in such cases Here again, however, although the shock treatments are exceptionally effective in removing the symptoms, only intensive psychotherapy can change the existing neurotic personality structure.

SOMATIZATION REACTIONS

The gradual acceptance of the holistic point of view in modern medicine has led to the realization that the distinction between mental and physical illness is not sharp and clear-cut but is one of emphasis—that all illnesses are illnesses of the whole individual and not just of his arm or lungs or mind. This holistic approach to illness has been labeled *psychosomatic medicine** and has led to an investigation of the role of psychological and sociological factors in all types of illness

Although these investigations are still in their infancy, it has been repeatedly demonstrated that psychological factors, such as anxiety, fear, anger, and other emotional conditions, seriously affect the general resistance of the organism to disease, and in some instances may even bring about actual tissue pathology. The crucial importance of such psychological factors has now been established in the onset and course of many disorders which until recently were considered to be purely medical—for example, peptic ulcer, high blood pressure, asthma, acne, migraine, overweight, and even the common cold.

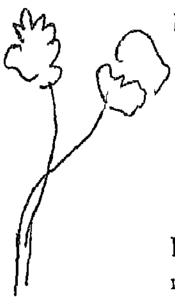
In addition, more attention has been paid to the patient's attitude toward his medical ailment How does the tubercular patient react to his changed life situation—to the shattering of his hopes and plans, the limitation of his activities, and the prospect of invalidism, dependence, and perhaps death? Will he fail to cooperate in treatment and perhaps even welcome death as a way out of his problems, or will he fight the disease with full cooperation in treatment and a determination to get well?

The patient's reactions are of vital importance in determining the outcome of many diseases, as well as in analyzing their sources. Some patients seem to give up and die where

* For a more extensive treatment of psychosomatic disorders the reader is referred to the works of Dunbar[18, 14], Alexander and French[4], and Weiss and English[74]

Summary Chart of Psychoneurotic Disorders

REACTION	MAJOR SYMPTOMS	BASIC DYNAMICS
Anxiety	"Free floating" anxiety, usually punctuated by acute attacks	Feelings of inadequacy in the face of internal or external "dangers"—anxiety not "bound" or controlled by ego defenses
Asthenic	Feelings of weakness, fatigue, lack of enthusiasm, somatic complaints	Protection of self from anxiety aroused by unsatisfactory life situation in which individual feels "trapped" Utter discouragement—feels too tired and sick to continue fight
Hypochondriacal	Obsessive concern about state of health, accompanied by multiplicity of somatic complaints	Preoccupation with bodily processes and alleged "illnesses" in order to escape from feelings of failure and inferiority and to avoid future striving toward seemingly unattainable goals The self thereby protected from anxiety-arousing stress
Conversion	Simulation of actual "organic" illness—may involve varied sensory, motor, or somatic illness symptoms	Getting sick to escape from anxiety-arousing stress situation
Dissociative	Amnesia, fugue, multiple personality, somnambulism	Escape from anxiety-arousing conflicts by isolating or dissociating opposite poles of the conflict, e.g., in fugue reaction the conflict between fighting and running away is solved by becoming amnesic and running away
Phobic	Irrational fears which individual realizes are irrational but which lead to anxiety if not heeded	Protection of self from anxiety-arousing stress by displacing anxiety from the actual danger to some symbolically related aspect of it which then protects patient from having to face the stress situation itself



Obsessive-compulsive	Persistent thoughts or impulses which the individual realizes are irrational but which he cannot avoid	*Obsessive*—displacing of dangerous thoughts, cutting off of anxiety-arousing internal desires from affective base so that they appear in consciousness as obsessive thoughts but without normal motivational base; protection of self from internal and external dangers by obsessive "ordering" of situation so that nothing can "go wrong" *Compulsive*—magic rituals designed to counteract dangerous obsessive thoughts and to protect individual from them
Neurotic-depressive	Feelings of dejection, discouragement, self-depreciation	Extreme discouragement resulting from environmental setbacks with part of the anxiety aroused by these setbacks allayed by intropunitiveness (self-punishment)
Somatization	Various visceral symptoms such as chronic gastritis with actual organic disturbance or pathology	By-product of chronic and exaggerated physiological mobilization—typically associated with the channeling of anxiety through autonomic nervous system to the visceral organs Symptoms essentially represent visceral expression of anxiety

medically the chances seemed good for their recovery, whereas others with more serious organic pathology survive for incredible periods and even get well In fact, Dunbar[18] has concluded that it is often actually "more important to know what kind of a patient has the disease than what kind of disease the patient has" (p 23)

Symptoms. In somatization reactions we are essentially applying this psychosomatic approach to the understanding of certain specific psychoneurotic reactions in which the anxiety is relieved by channeling the original impulse through the autonomic nervous system into organ symptoms and complaints. Five main categories of somatization reactions have been delineated:

1. *Psychogenic gastrointestinal reaction,* including all sorts of complaints centering around gastrointestinal functions such as constipation, chronic gastritis, mucous colitis, hyperacidity, and the beginnings of peptic ulcer.

2. *Psychogenic cardiovascular reaction,* including such types of cardiovascular reactions as paroxysmal tachycardia, pseudo-angina pectoris, and some types of hypertension In general, these reactions involve an increase in blood pressure and a speeding up of heart action resulting from the prolonged emotional stimulation of these organ systems.

3. *Psychogenic genito-urinary reaction,* including reactions in which the emotional tension is primarily discharged through and modifies the functioning of the kidneys and sex organs. Included here are certain types of enuresis, menstrual difficulties, and certain instances of frigidity in women and impotence in men

4. *Psychogenic respiratory reaction,* includ-

ing various cases of bronchial spasm, hyperventilation, and sighing respirations which are of emotional origin

5. *Psychogenic skin reaction,* including various so-called neurodermatoses, dermagraphia, some cases of hives, edema, acne, and related disorders where emotional factors play a major part.

The following case history is a rather complex one dynamically but will serve to illustrate some of the factors involved in one somatization reaction.

"A short, young man with close-cropped, blond hair, shabby, collegiate clothes, a drawn, mask-like facial expression, and downcast eyes came for analysis because of lifelong feelings of inferiority and shyness He had a hideous facial skin eruption diagnosed as eczema Lesions also were present on the flexor surfaces of the forearm, the dorsum of the hands, and on the scalp, as well as occasional spots on the legs

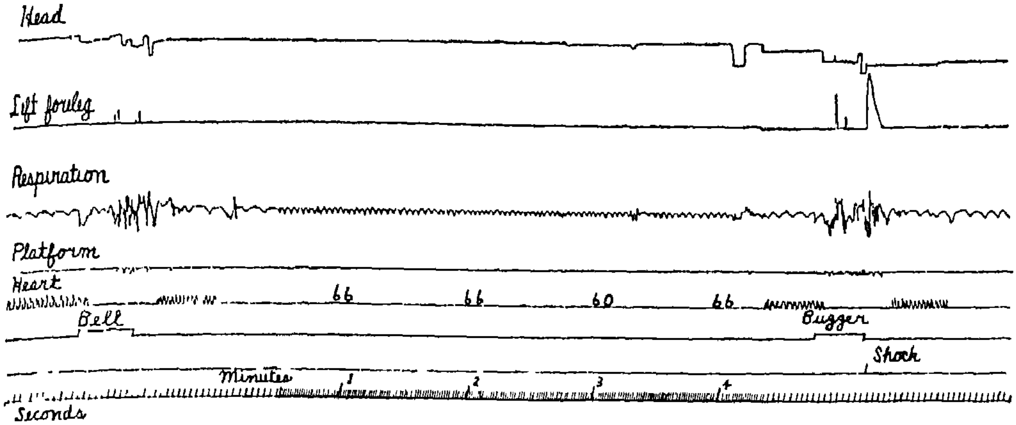
"His analysis brought out the following facts about his life history He had been much loved by his mother, a gentle person of esthetic temperament who, he felt, idolized him in preference to his two younger brothers, at the same time she was apparently unconsciously seductive For instance he recalled his anxiety in response to his mother's often putting vaseline on his penis when he was 4 When he was 7 years old she began to have a series of pulmonary hemorrhages, and when he was 8 years old she died of pulmonary tuberculosis During the months of her final illness he spent hours with her, but would scurry away when he heard his father returning home

"He remembered with great bitterness his father's warnings to remain out of his mother's bedroom Her death produced such an intense emotional shock in him that he never really recovered from it He believed that he and his father were somehow implicated in his mother's death His father was a domineering, hard-driving, very successful business man of the 'Napoleonic' type Toward him, especially after his mother's death, the patient felt a mixture of admiration for his success, and antagonism . . .

From early childhood the patient felt inferior to other boys in athletics, and succeeded in compensating for this feeling by brilliance in the classroom However, when, at the age of 15, he entered an exclusive preparatory school, he found it impossible to adjust. He felt his inequality with the other boys so keenly that for the first time he was not able to outshine them in the classroom That year, marked by so much tension and frustration, was followed by a stay at camp While there, following an inoculation of smallpox vaccine, his skin broke out over his head and face He became acutely disturbed and expressed his guilt over masturbation to everyone in camp. . .

"He spent the next four years at a western university of high standing, where he became associated with a group of eccentric, brilliant, neurotic young men who indulged themselves in 'esthetic' experiences and obscenities, and might be said to have majored in schizophrenia He managed to maintain a good scholastic standing, particularly in literary and writing courses Very often, however, around examination time, his skin would break out, he would contract a cold and spend a few days in the hospital On several occasions these attacks were precipitated by dates with girls . . .

"In the early part of his analysis and in his daily life he tried to display himself constantly as a literary genius, a Rabelaisian cynic, and a defeated eccentric with macerated skin—or else a tragic, ruined nonentity bringing humiliation on himself and his father. He was in a constant state of frustration He never could write successfully, he was impotent with women, and his exhibitionism failed to impress. . His job, his friendship and love affairs he permitted to have no real claims upon him or meaning to him Reality, with its demands for conformity and sublimination, he could not accept. He was constantly impelled to attack weak, depreciated women, who were the only ones who bothered about him—and to attack himself, lacerate his own skin At the culmination of intense periods of self-destruction, when this conflict was brought to a peak by the demands of external reality—



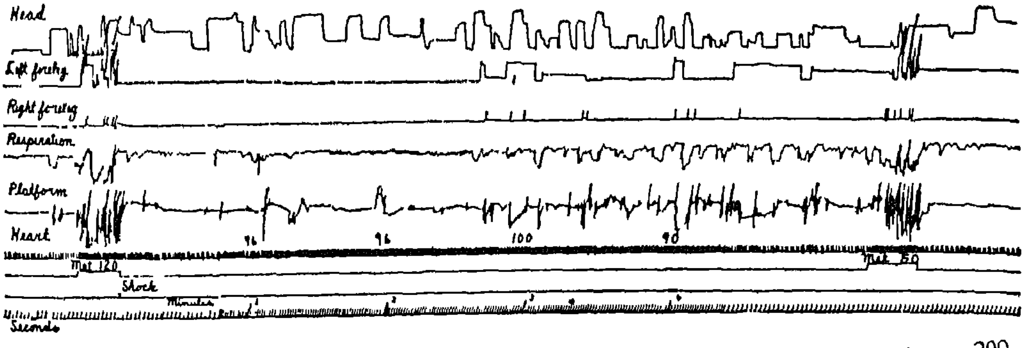
An experiment reported by Anderson, Parmenter, and Liddell has cast considerable light on the clinical observation that "heart trouble" (cardiovascular disorder) often seems to be associated with extreme anxiety and stress. Sheep which had been made neurotic by experimental methods were observed to develop a cardiac disorder.

The experimental procedure consisted of putting sheep in a loose harness, then training them to discriminate between two kinds of signals: one signal being followed by a mild shock applied to the left foreleg, the other by no shock. When the sheep heard the first signal, they executed precise rhythmical movements of the left foreleg, in anticipation of the shock. When they heard the second type of signal, they remained quiet. Then the sheep were made neurotic by instituting spatial or temporal relationships between the two types of signals which made discrimination too difficult.

There were several manifestations of the experimental neurosis in the sheep: among them, overreaction to stimulation, extreme restlessness, and irregular and rapid respiration. In addition, over a two-year period a marked and apparently permanent disorder of heart action gradually appeared. The graph above shows the behavior of a normal sheep during a typical test of its conditioned responses to the shock-signal situation. From top to bottom, it shows head movement, movement of the left foreleg (to which shock is applied), respiration, bodily movement of the sheep on the platform, heartbeat (the numbers indicate rate of heartbeat each minute), conditioned stimulus, shock, and time in seconds. The graph below shows behavior of the same sheep after the development of the neurosis. A cardiac disorder has developed in which the pulse is rapid and irregular and the heart action is extremely sensitive to the conditioned stimulus and to other stimuli as well. It was found that the heart began to beat very rapidly in response to mild stimuli which aroused no pulse response in normal sheep. Both in the laboratory and in the barn, the neurotic animals showed a long-continued increase in pulse rate, along with premature beating and sometimes with coupled rhythm.

Although such findings cannot, of course, be applied directly to human beings, they can suggest and support various hypotheses and observations which contribute to the understanding and cure of many bodily ailments in human beings.

(O. D. Anderson, Richard Parmenter, and Howard S. Liddell, "Some Cardiovascular Manifestations of the Experimental Neurosis in Sheep," Journal of Psychosomatic Medicine, *Vol. 1, January 1939, pp. 93-100. Graphs used by permission.)*



as, for instance, when he had to make his way as a member of a boy's camp, or when he graduated from college and had to get a job—he consciously desired, and actually carried out, the solution of his conflicts by being brought home to his father sick and helpless, with severely infected skin, weeping . .

"During analytic hours he moved about on the couch, waved his arms continuously, and spent a good deal of time trying to make an impression with his knowledge of music, art, and literature, identifying himself with Van Gogh

"It soon became clear that his exhibitionism served many purposes It could be turned, with versatility, into a defense against, or an expression of, his passive homosexual tendencies He also used his intellectual exhibitionism as the solace for his wounded narcissism, since he could never expect to become a successful industrialist like his father His excessive ambition and wish to outdo his father could only find expression in this intellectual manner

"He began to see, more and more, that his main conflict centered around the urge to compete with his father, an ambition doomed always to failure " (Case by Miller in Alexander and French[4], pp 405-407, 412)

Apparently the conflicts were causally connected with the skin lesions in the following ways (a) as a relatively direct somatic expression of anxiety, (b) as a defense against feelings of failure and inferiority, (c) for exhibitionistic purposes which yielded some compensatory attention, and (d) as a means of self-punishment for failure.

Dynamics. The normal individual is able to discharge his emotional tensions, like hostility, through appropriate verbal or physical activities. This may not go so far as physical combat but it may involve being frank in expressing his disappointment in someone in no uncertain terms, or taking out his feelings in competitive sports, or hitting a punching bag Most psychoneurotic defenses also permit some expression or discharge of emotional tension, although this is often not entirely adequate or satisfactory. In somatization reactions, however, normal channels of emotional discharge are blocked and the emotional tension is discharged through the visceral organs. The visceral symptoms and complaints themselves are due to an exaggeration of the normal physiology of emotion. Long-continued visceral dysfunction may eventuate in actual structural changes, such as we see in peptic ulcers (See pages 216-217)

Since this emotional discharge takes place on an unconscious level, the anxiety and other subjective emotional feelings may be partly or completely cut off—that is, the individual may not consciously experience the anxiety or hostility or other affect which is being aroused by the original impulse. Rather the anxiety is "short circuited" through the autonomic system to be discharged in visceral expression of various types.

One particular problem that arises in connection with the dynamics of somatization reactions is that of *specificity* Why does one individual react with bronchial spasms, another with hives, and so on? There are two general explanations which have been advanced to account for this

The first theory assumes that any emotional tension may influence practically any physiological processes and that the choice of symptoms depends upon the history of the patient and his constitutional make-up if he has a weak stomach, he is presumably prone to stomach upsets when he becomes angry or anxious; if he has perhaps had an early respiratory infection, then his lungs may be the most susceptible spot and he may react to emotional upsets with an asthma attack.

The second explanation emphasizes the differences in the physiological changes accompanying various emotional states—for example, between hostility and anxiety or between hostility and fear Since the chronic unrelieved emotional state varies, so also, presumably, will the resulting somatic reaction vary correspondingly.

The latter explanation also tends to empha-

size the nature of the emotional conflict giving rise to particular emotional tensions, as well as the difference in the physiological concomitants of various emotional states For example, there may be no "typical" ulcer or hives patient in terms of certain personality types but rather a certain typical conflict situation that may tend to the production of such reactions in a setting of various kinds of personality structures.

As we have noted, somatic symptoms and complaints occur as part of many other psychoneurotic reactions and are by no means confined to the category of somatization reactions proper Somatization reactions are those in which the major share of the anxiety is handled via the autonomic system in visceral expression or discharge rather than by compulsions, phobias, or other neurotic defense reactions

GENERAL ETIOLOGY OF THE NEUROSES

In our preceding discussion (Causes) we have reviewed several specific types of neurotic reactions. Now let us turn to an evaluation of the role of biological, psychological, and sociological factors in the neuroses in general

BIOLOGICAL FACTORS

In the neuroses, as in other types of psychopathology, the precise role of inherited predispositions and constitutional factors has not been delineated. Ample evidence from Army records and from civilian studies indicates that the incidence of psychoneurotic disorders in the family history of neurotic patients is much higher than that for non-neurotics (McNeel and Dancey[42], Sheps[64]) But whether such findings demonstrate the importance of biological heredity or merely of an undesirable early environment is impossible to say It seems unlikely, however, that heredity plays a primary role per se in the development of the psychoneuroses.

However, certain biological factors do seem to be important in the development of the neuroses We can readily see that many of the neurotic symptoms, such as anxiety, persistent tension, palpitation, gastrointestinal disturbances, and increased reaction-sensitivity, are based upon the real emergency physiological changes engendered by conflicts. If one is hypersensitive to start with—perhaps because of a family background in which a great deal of attention and worry were given to every minor ailment—the slightest stomach upset or heart palpitation may be carefully watched for, worried about, and regarded as indicative of serious illness The threat of disease now causes worry and fearfulness in its own right, which may have the effect of fostering more stomach upsets or heart palpitations. And if apparent invalidism frees the individual from an unpleasant and unsatisfactory life situation, the stage is all set for the development and maintenance of neurotic illness.

The very real biological effects of prolonged emotional tension in the form of loss of sleep, poor appetite, fatigue, and hypersensitivity may lower the general level of both biological and psychological resistance Actual physical illness or injury, overwork, poor diet, and related biological conditions may have the same effect But it is prolonged psychological conflicts which provide the essential basis for a chronic psychoneurotic reaction. This point is often difficult to accept, particularly by individuals who feel that their chronic feelings of fatigue must be due to overwork or to run-down physical condition Actually the physical fatigue and run-down physical condition are most often reactions to and results of the prolonged emotional conflicts.

It is particularly important to bear this in mind in cases in which a neurotic reaction is superimposed upon an actual physical ailment The physical ailment even here is of secondary importance as far as the neurotic reaction is concerned The ailment does not

"cause" the neurotic reaction or even necessitate its appearance. The neurosis is rather a function of the way the individual reacts to the stress of the physical ailment plus all the other stresses—biological, psychological, and sociological—that are comprising his total life situation.

One particularly puzzling aspect of certain neurotic reactions is the way in which neurotic conflicts are translated into paralyzed arms and other actual physical-illness symptoms. What are the psychobiological mechanisms involved in hysterically produced fevers and anesthesias? Although we have an interesting clue in the fact that such phenomena can be duplicated under hypnosis, we still do not understand the actual dynamics involved in conversion reactions.

PSYCHOLOGICAL FACTORS

A number of psychological theories of the neuroses have been advanced which are particularly pertinent to our present discussion.

Adolf Meyer[17] emphasized unrealistic levels of aspiration and lack of self-acceptance in his approach to the neuroses. He felt that many people get into difficulty because they are unable to "accept their own nature and the world as it is, and to shape their aims according to their assets." (p. 539) Rather they seem to suffer from "a false sense of competition which does not allow the human being to take himself as he is." (p. 555) Failing in the achievement of their unrealistic goals, these individuals develop feelings of inferiority, apprehensiveness, and other faulty emotional attitudes which eventually lead to a "break of compensation" and to the use of neurotic defensive measures. Since this decompensation is not as pronounced as that in the psychoses, Meyer considered psychoneurotic disorders as "part reactions" in contrast to the more pronounced personality disorganization in the psychoses, which he referred to as "whole reactions."

In several respects Adler's[2] approach is similar to that of Meyer. In the competitive framework of modern society most of us seem unable to accept ourselves as we are, but have deep-seated feelings of inferiority and inadequacy in relation to the abilities and accomplishments of others. Seemingly the only way we can "compensate" or alleviate these feelings is by trying to triumph over others and dominate them in order to prove our superiority. The neurotic is one who is too fearful to enter into normal competitive activities with others but compensates—or overcompensates—for his feelings of inferiority by the use of unhealthy defenses in an attempt to safeguard himself from the threat of failure and achieve feelings of superiority. Thus, for example, the neurotic who gets "sick" excuses his failure, removes himself from further striving toward hurtful goals, and forces others to attend and look after him, achieving thereby a position of importance and some measure of domination over others. Although Adler's approach may not be applicable to all neurotic reactions, it is a major contribution to the understanding of many neurotic reactions in our own particular highly competitive civilization.

In his early theories Freud* emphasized psychic trauma associated with sexual seduction in childhood as being of primary etiological significance in the psychoneuroses. This was superseded by a closely related theory to the effect that the major origin of neurosis is to be found in the "Oedipus situation": the child supposedly has incestuous wishes toward one of the parents but as a result of the frustration of these wishes acquires conflicting fears.

This view was then extended to a general approach in which the major origin of the neuroses was assumed to be frustration of instinctual impulses by social experience, and the resulting internal conflict between the instinctual demands and the internalized social restraints. Then the emphasis was shifted somewhat to include the important role of the

* Misbach[50] has an excellent summary of Freud's views on the etiology of the neuroses to which we are indebted in our present discussion.

emotional atmosphere of early parent-child relationships in the family milieu, the unconscious attitudes of the parents (such as rejection) were supposedly absorbed into the ego structure of the child, thus paving the way for later neurotic reactions

In his later work, however, Freud abandoned the attempt to find a specific etiologic source of the neuroses and centered his efforts on understanding the nature of neurotic reactions rather than differentiating their etiologic sources. In so far as he did discuss the question of etiology, he emphasized a multiplicity of etiologic determinants, including heredity, physiology, and environmental factors

Later analytically oriented writers, including Fenichel[18] and Horney[30], have emphasized childhood emotional experiences leading to faulty environmental evaluations and severe conflicts which center around the ego or self Fenichel feels that situational stresses which tend to reactivate childhood conflicts and threats are particularly potent in the production of neurotic reactions in psychologically predisposed individuals. For example, an adult who was rejected in childhood by his father and who reacted with intense feelings of insecurity and hostility, may adjust satisfactorily in adult life until he obtains a job in which he feels that his employer is not satisfied with him. This arouses his old fears, insecurities, and hostilities in regard to rejection by an authority figure and precipitates a neurosis. Of course, if the individual's experiences subsequent to childhood have been such as to counteract his unfortunate relations with his father, this pattern would not hold true. But where these early wounds have never been properly healed, they may be later reopened by appropriate stress situations, with resulting neurotic manifestations.

Horney has particularly emphasized the child's hostile reaction toward rejecting parents as a basic nucleus for later neurotic reactions. Since this hostility is too dangerous to express openly, it must be repressed. Now, to avoid the possibility of its breaking through repressive defenses into overt action, with the threat of parental retaliation or desertion, the child must avoid all unnecessary friction with his parents This means he cannot stand up for his own rights and must learn to tolerate parental injustices Thus he submerges many of his own desires and needs and spends much of his energy fighting his own internally dangerous impulses The result is, of course, apt to be a crippling of his own personality development and a predisposition to later neurotic and other psychopathological reactions.

In her tripartite division of personality reaction types into those who move "away from," "toward," and "against" people, Horney extends her approach to the neuroses to include disturbed social relations and ego conflicts in a broad sociological setting* She points out that the exaggeration of adjustive reactions in any one of these three directions interferes with the adequate use of the other two techniques and impairs effective social adjustment Thus an individual who feels inferior, insecure, and fearful in his dealings with others may tend to withdraw But this withdrawal does not necessarily reduce his desire and need to feel equal to others and to be successful in competitive striving for social status and achievement What it does is to intensify the conflict, for his withdrawal takes him out of the stream of social interaction and interferes with the give and take and the reality testing so essential to an adequate social adjustment If he attempts to approach people and to enter into competition with them he becomes anxious, for this is the area of stress which forced him to withdraw On the other hand, if he maintains his withdrawal it almost inevitably leads to anxiety stemming from the underlying feelings of inferiority, dissatisfaction, and self-devaluation Thus his adjustive reactions intensify the very problems that he is trying to solve, and lead to chronic "neurotic" conflicts.

* Previously discussed on pages 112-113

Unconscious Motivation

**Stills from the film, courtesy of Dr. L F Beck
University of Oregon**



In this interesting film the two subjects shown in these pictures are told under hypnosis that when they were children they took two pennies from a red purse that they found in a park on the way home from school and then lied about it to their respective mothers This buried "guilt complex" is not remembered by the subjects in their later waking state but forms the nucleus of an experimental neurosis which develops and manifests itself on a conscious level in numerous ways The two subjects feel tense, worried, and vaguely guilty (above, right) without knowing why Claire says she feels as though she should be doing something—or has done something wrong Don reports being all on edge and feeling there is something he should tell someone Throughout the rest of the film they attempt, by several successive means, to discover what it is that is troubling them

In discussing the possible causes of their "symptoms," the subjects at first offer explanations that are superficial and have nothing to do with the actual motivation Then, at a signal arranged previously during their hypnotic state, they both have symbolic dreams which are disguised expressions of the unconscious "complex" Though the dreams vary, they contain certain comparable elements that provide the subjects with their first real clues Added insight comes as they analyze their responses to ink-blot (below, left), thematic apperception (below, right), and word-association tests

By sharing their thoughts and feelings, as in group therapy, the subjects help each other to gain "insight" into their various responses and gradually to bring to light the buried material which has led to their feelings of tension and uneasiness Bit by bit all of the elements of the story come to them: pennies—two—red purse—park—school—mother—fear of punishment At first these elements are disconnected and unclear, but by the time the film ends, the subjects have reconstructed the whole story in proper sequence, down to the last detail As their insight increases, their anxiety becomes visibly less, until, when the last item falls into place, they are completely freed of all anxiety and tension—they have recovered





Recognition of this tendency of neurotic reactions to maintain rather than solve the patient's problems is basic to an understanding of chronic neuroses. We have found this repeatedly in our consideration of the various specific neurotic reactions. Thus the neurotic may be driven to the firm belief that he is ill, for it is by this means that he defends himself from seemingly insurmountable problems But now a vicious circle develops. The symptoms themselves further complicate his adjustive problems He is too sick or too tired to accomplish anything, even if he tries. So the worse the symptoms, the worse the adjustment, and the more need for more symptoms

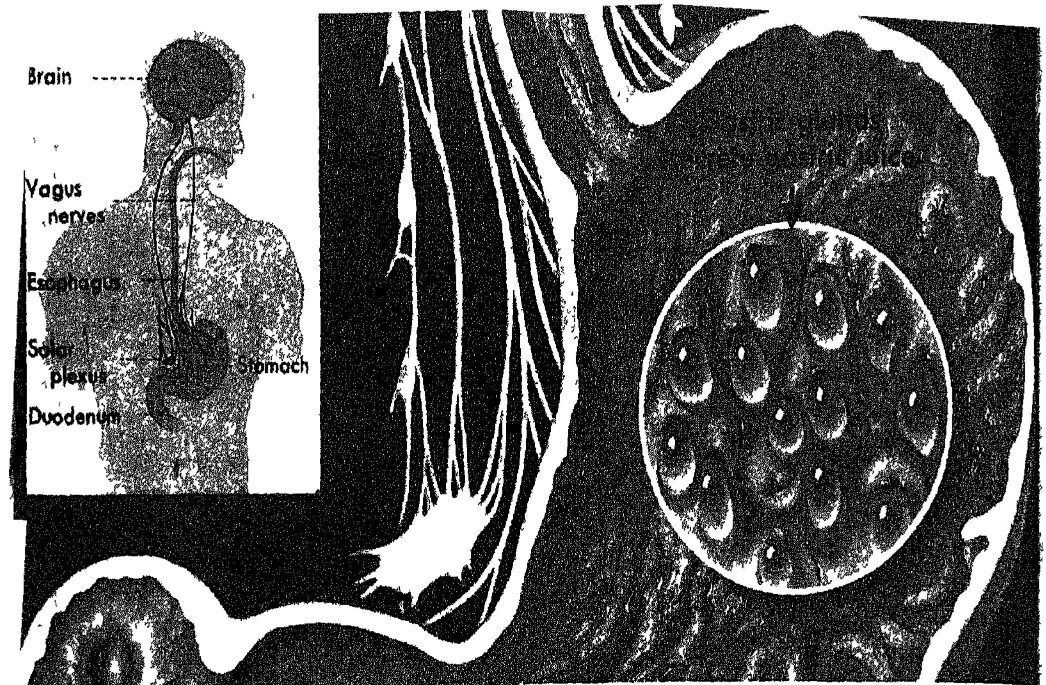
Thus the neurotic pays an exorbitant price for his illness symptoms, for they result in considerable personal inconvenience and prevent him from achieving a realistic solution to his difficulties In addition, his symptoms usually lead to some measure of underlying guilt and self-devaluation. For, although he does not consciously plan his symptoms, and although a sick person is no longer expected to compete on an equal basis with others, he still usually does not escape entirely from feelings of inadequacy and self-devaluation as a result of his failure to live up to his aspirations or ego ideal Only through desperate effort is he able to convince himself that all his troubles are the fault of his illness

It is the faulty adjustment patterns learned in childhood which seem to be the crucial factor in predisposing an individual to actual neurotic reactions when increased stress comes With a groundwork of healthy psychological development, he does not get a start toward psychoneurotic patterns and is unlikely to develop them in later life On the other hand, any early parent-child relationships or other experiences which interfere with the development of mature, realistic, well-integrated personalities may set the stage for later neurosis

We have already had considerable background in this whole area in Chapter 4, in our study of the effects of parental overprotection, excessively high standards, neurotic parents, and so on As we have seen, children subjected to these conditions are emotionally handicapped They may be oversensitized to life's threats and dangers and come to view the world as a terrifying place, they may experience needless feelings of failure and inferiority from their inability to live up to the parental expectations which they have incorporated into their own level of aspiration; they may be overly sensitized to bodily processes and to the value of illness in gaining parental attention and affection, they may be so dependent upon parents for their security and protection that they become almost panic-stricken when forced to make their way alone

Similarly, many neurotics have had a background of childhood insecurity which prevents the development of normal self-confidence and feelings of being able to cope with dangers As a result the neurotic does not feel that his security lies within himself Feeling instead that it comes from the outside, he often spends a great deal of energy and time trying to establish a secure life situation or seeking emotional crutches which will assure him of safety and protection Since the lack is within him, however, these external safeguards are rarely satisfactory It is in this sense that psychoneurotic disorders are commonly said to be based primarily upon internal conflicts rather than on external stresses

Several factors contribute to determine the type of neurotic reaction that occurs We have already seen that three kinds of stress situations seem to precipitate neurotic defenses (1) when the individual feels that he is incapable of living up to his various goals and ambitions or has failed to do so, and cannot tolerate the resulting feelings of inferiority and self-devaluation, (2) when dangerous desires (e.g., sexual, hostile) seem in danger of breaking through existing ego defenses into overt behavior, and (3) when the individual finds himself in what he considers an intolerable life situation. This may include the loss of a person upon whom the patient feels



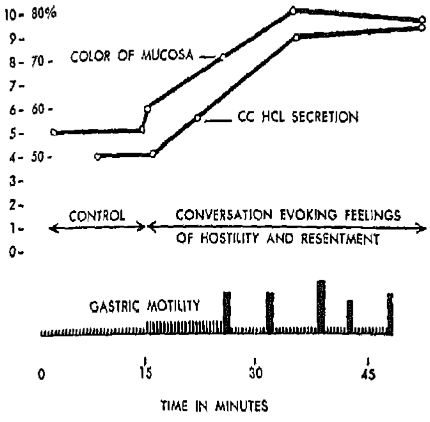


Psychosomatic Medicine

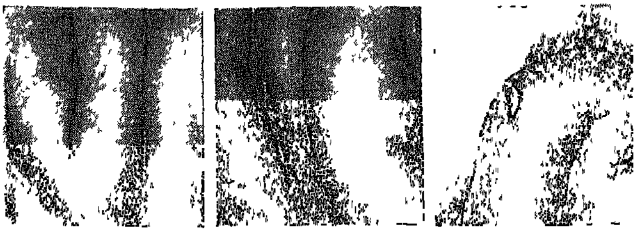
The Holistic Approach to the Peptic Ulcer Syndrome

The gradual acceptance of the holistic point of view in modern medicine has led to the realization that the distinction between mental and physical illness is not sharp and clear cut but is one of emphasis—that all illnesses are illnesses of the whole individual and not just of his arm or lungs or mind. This new approach to illness has been labeled psychosomatic medicine, and already investigations have yielded valuable information concerning the importance of psychological and sociological factors in the onset and course of many disorders until recently considered to be purely medical, such as peptic ulcers, high blood pressure, asthma, migraine, overweight, and even the common cold. A review of factors found to be important in the development and cure of peptic ulcers will demonstrate the need for this holistic or psychosomatic approach to illness.

The peptic ulcer usually results from the excessive flow of the stomach's acid-containing digestive juices, which eat away the stomach lining leaving a crater-like wound called an ulcer. It is now recognized that nervous tension, worry, repressed anger, and general emotional strain even more than food and drink stimulate the flow of these digestive juices. In a historic experiment, Wolf and Wolff[77] demonstrated that feelings of strong resentment, hostility, and anxiety result in a measurable increase of acid production and the engorgement of the stomach with blood. The chart opposite shows the typical increase in acid secretion and redness of the mucosa in a patient during conversation evoking hostility and resentment. During a two-week period of mixed anxiety and resentment the acid secretion averaged 55 cc. per hour and the mucosal color index 70. For the two weeks preceding, the acid secretion had averaged 36 cc. per hour and the mucosal color index 56. When the stomach is engorged with blood, it is readily traumatized, even vigorous contractions may produce small erosions. Ordinarily mucus forms which acts as a buffer and permits rapid healing. But sustained emotional conflicts, with prolonged engorgement and hyperacidity, may render this protective mechanism inadequate and a chronic ulcer may develop. The fact that the duodenum lacks this protective covering may explain why most peptic ulcers form there.



From Stewart Wolf and H G Wolff, Psychosomatic Aspects of Peptic Ulcers, Scope, II(1946), 4 9



After Stewart Wolf and H G Wolff, *Human Gastric Function*, Oxford University Press, 1947, p 223

Normal mucosal folds of the stomach (left) during feelings of security and contentment, contrasted with the same folds engorged with blood (center) during hostility and resentment Prolonged oversecretion of gastric juices may result in the small punched-out ulceration at right

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The active and very "real" role of psychological factors is still further attested by the interesting discovery of Wolf and Wolff[77] that fear and sadness had exactly the opposite effects on acid secretions and mucosal color, causing both to decrease sharply.

Thus as we might expect, individuals whose life situation and/or personality organization make them prone to chronic anxiety and resentment are also prone to the development of peptic ulcers Such reactions seem to be relatively common among many insecure, driving, and ambitious individuals in our highly competitive Western civilization In fact, ulcers are often described as an occupational disease of business executives, writers, lawyers, and others

The incidence of stomach ulcers varies greatly from one society to another, evidently as a result of the socio-cultural differences Hartman[28] states that among the Indians of Latin America and among the Chinese coolies, peptic ulcers are nonexistent Steigmann[67] found that although the rate of incidence of stomach ulcers among the southern urban Negroes in the United States is fairly low, that for Negroes who have lived more than five years in Chicago is the same as that of the whites During the air raids over England in World War II perforated peptic ulcers increased markedly. (Wolf and Wolff[77])

The history of ulcers in our Western culture has shown considerable variation Peptic ulcers first came into prominence between 1820 and 1840 and during this period they were primarily confined to young women (Tidy[70]) In the second half of the 19th century, the incidence of stomach ulcers underwent a shift, usually affecting males With the turn of the 20th century we note a marked increase in peptic ulcers and from 1910 to 1940 the death rate in the male more than doubled and was estimated to be almost five times that of the female (Perrott[55]) It is estimated that about one in every ten Americans now living will at some time develop a peptic ulcer Thus modern civilization is apparently especially conducive to the chronic emotional reactions that lead to the development of peptic ulcers Prevention on an effective scale must be aimed at reducing those socio-cultural conditions which foster widespread chronic anxiety and resentment

*Not only can the development of stomach ulcers be best understood from a psychosomatic viewpoint, but the most effective treatment must also proceed within this framework The physician first determines whether the ulcer is of the duodenal peptic type. If this is the case, he can reassure the patient who fears cancer, for the duodenal ulcer is rarely, if ever, cancerous He may prescribe a diet and various pharmaceuticals which help to control and alleviate the condition However, a cure is rarely effected unless adequate psychotherapy is undertaken to remove the chronic emotional reaction patterns which eventuated in the stomach ulcer in the first place **

** Two surgical procedures worked out for the treatment of stomach-ulcer patients and used in extreme cases which have failed to respond to less drastic methods of treatment are vagotomy and sympathectomy. The former involves the partial cutting of the vagus nerve and the latter the cutting of the sympathetic nerves These operations are still in experimental stages and full evaluation of them must wait*

dependent for his security, the reactivation by present stress of fears and conflicts which were not adequately worked through in childhood, and unpleasant situations which offer little opportunity for need gratification and from which the individual sees no way out

Anxiety reactions may appear in connection with any of these three types of stress. In the case of the other neurotic reactions, however, the evidence indicates that the type of symptom which will develop depends partly on which of the three types of stress is presenting the greatest threat and partly on the personality of the patient

When the stress centers primarily around the failure to live up to one's goals, the most typical psychoneurosis is regression or flight from reality into the symptoms of disease. Hysterical illnesses, hypochondriacal concern with bodily processes, or neurasthenic fatigue then become acceptable excuses for real or imagined nonperformance and obtain for the neurotic a second-rate means of getting attention and sympathy and maintaining his social status In addition, he no longer needs to face his real problems because he now has an illness problem which overshadows all others in importance and occupies most of his attention and effort

When dangerous desires which have been repressed are threatening to break through existing ego defenses, the individual experiences a warning signal in the form of anxiety, without necessarily becoming aware of the dangerous impulse itself However, this danger signal is associated with painful frustration and forces the ego to take stronger defensive measures to deal with both the anxiety and the stress In this situation neurotic reactions are more apt to take the form of phobic and obsessive-compulsive reactions Thus the neurotic who is in danger of what he considers immoral sexual behavior may resort to extreme reaction formation in the form of syphilophobia. Similarly, the neurotic with disturbing and dangerous hostile feelings and impulses may resort to various compulsions, the unconscious purpose of which is to counteract the dangerous desires.

When the neurotically predisposed individual faces what he considers to be an intolerable life situation, he may resort to any one of a variety of neurotic defensive reactions depending upon his particular personality make-up. One individual may develop a neurotic depression where another develops amnesia and perhaps wanders away in a fugue state

In concluding our discussion of psychological factors in neurotic reactions, it may be re-emphasized that we all resort to various defense mechanisms to maintain our ego integrity in the face of threat. When the stress is so severe that the normal use of ego defense mechanisms fails to do the job, the individual may be forced to elaborate his ego defenses into neurotic reaction patterns The particular neurotic pattern which is used will depend upon the nature of the stress and the personality make-up of the individual

Sociological factors. Neurotic reactions are found among all peoples and among all educational and economic groups Prostitutes, criminals, delinquents, successful businessmen, college professors, politicians, all have their proportion of neurotics However, the incidence and the particular type of neurotic reaction which occurs vary widely for different cultural groups

Hysteria, for example, is more common among primitive peoples and among patients from lower economic and educational levels, whereas obsessive-compulsive reactions and anxiety reactions are more common among the wealthier and better educated. During the war, hysteria was relatively more common among noncommissioned men, while anxiety reactions were in general more common among officers Perkins[54], in an analysis of neuropsychiatric rejectees from the state of Tennessee, found that psychoneurosis, neurotic traits, and psychosomatic disorders were quite rare among the hill people, whereas pov-

erty of affective response and a type of emotional immaturity were common

Hunt[31] found the relative incidence of psychoneuroses among Negroes in the United States to be less than among the white population Similarly, Wechsler[72] found that the incidence of psychoneurosis among a group of better educated, more intelligent, and socially superior British West Indian Negroes was greater than among a less privileged American group Carothers[9] found no obsessive-compulsive reactions among Kenya Africans He attributed this largely to an absence there of mystery or feelings of shame about sex, and to the fact that the African is part of a rigidly structured social organization and does not have to set up his own controls and standards or bear economic trials alone, but draws upon the strength and stability of the group and does not develop the tension and anxiety that come with a feeling of individual responsibility.

From these findings it would appear that as life conditions—particularly those involving social relations—become more complex and precarious, the incidence of neuroses increases.

THERAPY OF THE NEUROSES

The treatment of psychoneurotic disorders must of course be individualized to fit the particular needs of each patient In general, however, the most important elements in the treatment of all types of neuroses are (1) helping the patient to understand the dynamic significance of his symptoms—how they came about and what he gets out of them, and (2) helping him to strengthen his personality and find more adequate and effective means of dealing with his problems

These two steps look deceptively easy; actually there are several stumbling blocks. The first major obstacle is the resistance of the patient to being cured The neurotic patient frequently insists on discussing his illness symptoms at great length, seemingly in a sincere attempt to help the doctor get a clear view of them But when the therapist attempts to direct the conversation to the deeper meaning of his symptoms, the patient proceeds to go into more detail about his symptoms, complaining that the doctor does not yet have all of the information

During the next therapeutic period the patient may attempt to go all through his symptoms again. When he finally realizes that it will be necessary for him to go deeper into his problems, his resistance may show itself in several ways. He may denounce the doctor as an incompetent person who fails to understand his illness and continue searching until he finds a more "sympathetic" therapist

In some cases the patient's symptoms may temporarily disappear so that he is convinced it is unnecessary to return for further treatment For this reason the immediate disappearance of symptoms is often looked upon as a poor prognostic sign In still other cases the symptoms may seemingly become intensified and the patient may report that he is becoming worse and has decided to consult another therapist Thus, it is often very difficult to overcome the patient's resistance to the actual facing of his problems, yet this is required in any effective therapy.

Even when the patient's cooperation has been gained, there are many difficulties Intensive psychotherapy aims at restructuralization of the patient's personality in the direction of more adequate and satisfying ego values and adjustive reaction patterns, thus it is a long-range undertaking, requiring considerable time, effort, and expense The individual's life situation may need to be changed so that it will not negate the positive gains of therapy. Activities must be planned which will help him achieve a more able and mature personality development

A common pitfall in therapy is the treatment of symptoms rather than underlying personality difficulties Hysterical symptoms,

for example, may be removed through hypnosis. However, as we have already pointed out, unless the underlying personality conflicts are properly handled by psychotherapy the same neurotic symptoms or others designed to defend the patient from his problems will soon appear

In all justice it should be noted, however, that even relatively superficial psychotherapy does help many patients a great deal. This is especially true of patients who have considerable insight into their problems and do seriously desire to achieve a more adequate personality adjustment. Thus, various brief forms of intensive psychotherapy as well as group therapy are being increasingly used in the treatment of psychoneurotic disorders (A fuller discussion of modern diagnostic and psychotherapeutic procedures and their effectiveness appears later in Part IV.)

PROGNOSIS FOR THE NEUROSES

The general prognosis for psychoneurotic disorders is good. With intensive psychotherapy most neurotics *can be* either cured or brought up to a reasonable level of emotional maturity and integration; some even recover spontaneously In actuality, unfortunately, only a very small number of psychoneurotics probably ever *are* cured. This is largely the result of a lack of adequate treatment facilities for the great majority of psychoneurotic patients.

For those who do receive treatment, there is a dearth of statistics relative to the actual therapeutic benefits. Differences in the meaning of such words as "cured" or "markedly improved," differences in the type and severity of neurotic reactions in the first place, and failure to distinguish between immediate and long-range improvement make it difficult to evaluate the somewhat meager statistics that are available at this time.

In general it would appear that some 70 to 80 per cent of psychoneurotics show some improvement as a result of therapy, but only about 50 per cent maintain this improvement for any sustained period after the treatment has been completed. According to one study, women had a higher average recovery rate than men, but tended to relapse more frequently (Farr and Stewart[17]). In general, neurotic depressive, anxiety, and neurasthenic reactions seem to respond more readily to treatment than do hypochondriasis and obsessive-compulsive reactions Hysterical conversion or dissociative symptoms can usually be cleared up rapidly, but the patient's achievement of a mature and adequate personality is a difficult therapeutic assignment

Statistics are not available for an adequate comparison of different types of therapy. Psychoanalytic results seem to differ little from those of other methods of therapy, but it is possible that psychoanalysis has involved more severe cases In any event, it is considered relatively effective in treating the psychoneuroses.

Fear of committing suicide is a common psychoneurotic symptom, but the actual incidence of successful suicides among neurotics is not extremely high. Coon and Raymond[11] reported six suicides in their follow-up study of 1060 psychoneurotic patients, and Ross[60] reported seven suicides among 1186 English patients. Farr and Stewart[17], however, report an incidence of 8 per cent suicide in a follow-up of 200 neurotics treated at the Pennsylvania Hospital. The explanation for the markedly higher rate of suicide in the latter study is not clear, although it is possible that this study involved more seriously ill patients In any event the incidence of suicide is sufficient to necessitate careful preventive measures in the treatment of psychoneurotics.

How does neurosis affect the life span? Here, too, the statistics are inadequate, but it is a common belief that neurotics, despite their often gloomy prognosis for themselves, tend to take such exceedingly good care of

themselves that they outlive most of their more healthy contemporaries. One study, by Denker[12], did find that the life expectancy of a group of insured neurotics was greater than average. However, these statistics involve a special group (those carrying insurance) and do not necessarily apply to all psychoneurotics. But apparently, in spite of the many somatic disturbances and the chronic physiological overmobilization typical of neurotics, their life span is not unduly affected.

How does neurosis affect production and occupational adjustment? Many authors have proclaimed neurotics the "salt of the earth" and have believed that they should "be glad they are neurotic." Although many great persons in history could be counted as neurotics, there is considerable question as to whether their success in making worth-while artistic and scientific contributions occurred because of or despite their neurosis. In general, the evidence indicates that neurotics are sick people whose full potentialities for productive accomplishment cannot be achieved until they have worked through their conflicts and achieved a more effective personality adjustment. As Liber[37] puts it, "The real sufferers from neurosis . . . are entirely incapable of accomplishing anything while their sickness lasts." (p. 170)

Will neurotic reactions further decompensate into psychoses? The answer to this question is a controversial one. Many psychiatrists and psychologists maintain that the two types of disorders are fundamentally different and that neurotics rarely, if ever, become psychotic. In point of fact, few neurotics do apparently become psychotic, estimates here centering around 5 per cent. However, this may be due to the fact that neurotic defenses are sufficient to deal with most of the stresses that we have to face. If the stress demands were to increase markedly, it is probable that most neurotics would eventually become psychotic.

Certainly many psychotics reveal neurotic patterns prior to the onset of their psychoses and many neurotics evidence mild delusions which belong in the realm of psychotic symptomatology. Even severe psychotic reactions may be complicated by obsessive-compulsive, hypochondriacal, and other neurotic defensive patterns. This often leads to difficulties in classification in borderline cases. In the evaluation of 200 psychiatric cases by each of 14 psychiatrists Edelman[15] found disagreement in 27 cases as to whether the patient was neurotic or psychotic. Thus in general it would appear most profitable to think of a continuum from neuroses to psychoses with increasing personality decompensation.

REFERENCES

The reference list includes not only the sources from which the author has drawn material, but acknowledgments of the permissions granted by authors and publishers to quote directly from their works.

1 Adler, Alexandra. "Two Different Types of Post-traumatic Neuroses." *American Journal of Psychiatry*, CII(1945), 237-240.
2 Adler, Alfred. *The Neurotic Constitution*. New York: Dodd, Mead, 1926.
3 Alexander, Franz. "What Is a Neurosis?" *Digest of Neurology and Psychiatry*, Series XVI, April 1948, 225-233. Hartford, Connecticut: The Institute of Living.
4 Alexander, Franz and French, Thomas Morton, *Studies in Psychosomatic Medicine*. Copyright 1948 by the Ronald Press Company. "A Psychological Study of a Case of Eczema and a Case of Neurodermatitis," by Milton L. Miller.
5 Beard, G. A. *A Practical Treatise on Nervous Exhaustion (Neurasthenia), Its Symptoms, Nature, Sequences, Treatment* (rev. ed.) E. B. Treat, 1905.
6 Bennet, A. E. and Semrad, E. V. "Common Errors in Diagnosis and Treatment of the Psychoneurotic Patient: A Study of 100 Case Histories." *Nebraska State Medical Journal*, XXI(1936), 90-92.
7 British Workingman's Compensation Act. *Time*, July 7, 1947, 73.

8 Campbell, A and Cross, A G "Ocular Neurosis" *British Journal of Ophthalmology,* XXVIII(1944), 394-402

9 Carothers, J C "A Study of Mental Derangement in Africans, and an Attempt to Explain Its Peculiarities, More Especially in Relation to the African Attitude of Life" *Journal of Mental Science,* XCIII(1947), 548-597

10 Clardy, E R "Conversion Hysteria in a 10 Year Old Boy" *Psychiatric Quarterly* XXI(1947), 328-333

11 Coon, Gaylord and Raymond, Alice *A Review of the Psychoneuroses at Stockbridge* Stockbridge, Massachusetts Austin Riggs Foundation, Inc, 1940

12 Denker, Peter G, "The Prognosis of Insured Neurotics" *New York State Journal of Medicine,* XXXIX(1939), 238-247

13 Dunbar, Helen Flanders "Psychosomatic Medicine" In *Psychoanalysis Today* (Sandor Lorand, ed) New York International Universities Press, 1944

14 Dunbar, Helen Flanders *Synopsis of Psychosomatic Diagnosis and Treatment* St Louis C V Mosby, 1948

15 Edelman, I S "Problems in Psychiatric Classification" *Diseases of the Nervous System,* VIII(1947), 171-174

16 Erickson, Milton H. and Kubie, Lawrence "The Permanent Relief of an Obsessional Phobia by Means of Communications with an Unsuspected Dual Personality" *Psychoanalytic Quarterly,* VIII(1939), 471-509

17 Farr, Clifford B and Stewart, Genevieve M "Psychoneurosis in a Hospital for Mental Disease, A Statistical Study of One Hundred Men and One Hundred Women" *Journal of Nervous and Mental Disease,* XCV(1942), 133-145

18 Fenichel, Otto "Remarks on the Common Phobias" *Psychoanalytic Quarterly,* XIII (1944), 313-326

19 Fischer, Siegfried "Anxiety, Insecurity and Neurosis" *American Journal of Psychotherapy,* III(1949), 234-242

20 Flanagan, N B "The Promotion Depression" *Journal of the American Medical Association,* CXX(1942), 1383

21 Gill, M M "Malingering" *Bulletin of the Menninger Clinic,* V(1941), 157-160

22 Goldstein, K *Human Nature in the Light of Psychopathology* Cambridge Harvard University Press, 1940

23 Gould, Lawrence *The Way to be Happy* New York Doubleday, 1949

24 Guthrie, E R *The Psychology of Human Conflict* New York Harpers, 1938

25 Halpern, H F "Hysterical Amblyopia" *Bulletin of the U S Army Medical Department,* No 72, 1944, 84-87

26 Hamlin, Percy G "Camptocormia Hysterical Bent Back of Soldiers Report of Two Cases," *The Military Surgeon,* March 1943, pp 295-300

27 Harriman, Philip L "The Experimental Induction of a Multiple Personality" *Psychiatry,* V(1942), 179-186

28 Hartman, H R "Neurogenic Factors in Peptic Ulcer" *Medical Clinics of North America,* Vol 18, No 6

29 Homans, G C "Anxiety and Ritual The Theories of Malinowski and Radcliffe-Brown" *American Anthropologist,* XLIII(1941), 164-172

30 Horney, Karen *Our Inner Conflicts* New York Norton, 1945

31 Hunt, W A "The Relative Incidence of Psychoneurosis Among Negroes" *Journal of Consulting Psychology,* XI(1947), 133-136

32 Ironside, R and Batchelor, I R C "The Ocular Manifestations of Hysteria in Relation to Flying" *British Journal of Ophthalmology,* XXIX(1945), 68-98

33 Jenness, A and Jorgensen, A F "Ratings of Vividness of Imagery in the Waking State Compared with Reports of Somnambulism" *American Journal of Psychology,* LIV(1941), 253-259

34 Johnson, D M " 'Phantom Anesthetist' of Mattoon A Field Study of Mass Hysteria" *Journal of Abnormal and Social Psychology,* XL(1945), 175-186

35 Karnosh, Louis J and Zucker, E M *Handbook of Psychiatry,* St Louis Mosby, 1945

36 Kraines, S H *The Therapy of the Neuroses and Psychoses* (3rd ed). Philadelphia Lea and Febiger, 1948

37 Liber, Benzion *Psychiatry for the Millions* New York Frederick Fell, 1949

38 Lipton, S "Dissociated Personality A Case Report" *Psychiatric Quarterly,* XVII(1943), 35-56

39 Lorand, Sandor 'Anorexia Nervosa Report of a Case" *Psychosomatic Medicine,* V(1943), 282-293

40 Masserman, Jules H *Behavior and Neurosis An Experimental Psychoanalytic Approach to Psychobiologic Principles* Chicago University of Chicago Press, 1949

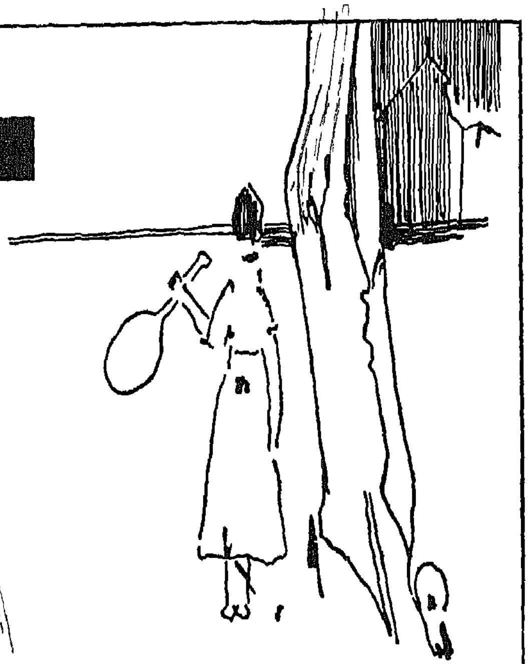
41. Masserman, Jules H *Principles of Dynamic Psychiatry* Philadelphia Saunders, 1946

42 McNeel, B H and Dancey, T E "The Personality of the Successful Soldier" *American Journal of Psychiatry,* CII(1945), 337-342
43 Menninger, Karl A *The Human Mind* (rev ed) New York Alfred A Knopf, Inc, 1945
44 Menninger, William C *Facts and Statistics of Significance for Psychiatry* The Hogg Foundation, University of Texas, 1948
45 Menninger, William C "The Diagnosis of Schizophrenia." *Bulletin of the Menninger Clinic,* XII(1948), 96-106
46 Merrill, B R "Psychogenic 'Malaria'" *Navy Medical Bulletin,* XLIV(1945), 69-72
47 Meyer, Adolf *Common Sense Psychiatry* (Alfred Lief, ed) New York McGraw-Hill, 1948
48 Michaelson, I C "Ocular Manifestations of Neuroses Commonly Found Among Soldiers" *British Medical Journal,* II(1943), 538-541
49. Miller, R B "Corneal Anesthesia in Hysteria" *Navy Medical Bulletin,* XLIV(1945), 749-751
50 Misbach, Lorenz "Psychoanalysis and Theories of Learning." *Psychological Review,* LV(1948), 143-156
51 Murphy, Gardner, *Personality* New York Harpers, 1947
52. Pai, M N "The Nature and Treatment of 'Writer's Cramp'" *Journal of Mental Science,* XCIII(1947), 68-81.
53 Pardee, I "Cachexia (Anorexia) Nervosa" *Medical Clinics of North America,* XXV (1941), 755-773
54 Perkins, O C "Analysis of Neuropsychiatric Rejectees from the State of Tennessee" *Diseases of the Nervous System,* VII(1946), 9-18
55 Perrott, George St J "The Problem of Chronic Disease" *Psychosomatic Medicine,* VII(1945), 21-27
56. Prince, Morton *The Dissociation of Personality* (2nd ed) New York Longmans, Green, 1930
57. Romano, John and Engel, George L "Studies of Syncope III Differentiation Between Vasodepressor and Hysterical Fainting" *Psychosomatic Medicine,* VII(1945), 315
58 Rose, John A "Eating Inhibitions in Children in Relation to Anorexia Nervosa" *Psychosomatic Medicine,* V(1943), 117-124
59 Rosenberger, Andrew I and Moore, James H "The Treatment of Hysterical Deafness at Hoff General Hospital" *American Journal of Psychiatry,* CII(1946), 666 669
60 Ross, Thomas A *Enquiry into Prognosis in the Neuroses* New York Macmillan, 1936
61 Sadler, William S *Modern Psychiatry* St Louis Mosby, 1945
62 Sandler, S A "Somnambulism in the Armed Forces" *Mental Hygiene* XXIX(1945), 236-247
63 Schuler, E A and Parenton, V J "A Recent Epidemic of Hysteria in a Louisiana High School" *Journal of Social Psychology,* XVII (1943), 221-235 Provincetown, Massachusetts The Journal Press
64 Sheps, J G "Psychiatric Study of Successful Soldiers" *Journal of the American Medical Association,* CXXVI(1944), 271-273.
65 Sherman, Mandel *Mental Conflicts and Personality* New York Longmans, Green and Co, 1938
66 Small, S M and Milhorat, A T "Anorexia Nervosa Metabolism and Its Relation to Psychopathologic Reactions" *American Journal of Psychiatry,* C(1944), 681-685
67 Steigmann, F "The Peptic Ulcer Syndrome in Negroes" *American Journal of Diseases of Nutrition,* III(1936), 310
68 Strecker, E *Fundamentals of Psychiatry* (2nd ed) New York Lippincott, 1944
69 Taylor, W S and Martin, M F "Multiple Personality," *Journal of Abnormal and Social Psychology,* XXXIX(1944), 281-300
70 Tidy, H "Peptic Ulcer" *Practitioner,* CLII (1944), 197-203
71 *Time,* June 2, 1947, pp 74-76
72 Wechsler, I *The Neuroses* Philadelphia Saunders, 1929
73 Weickhardt, G C and Langenstrass, K H "Psychosynthesis of Amnesia Report of Two Cases Treated by Hypnosis" *Journal of Nervous and Mental Disease,* CV(1947), 238
74 Weiss, E and English, O S *Psychosomatic Medicine* Philadelphia Saunders, 1943
75 Wilson, D C "Magical Thinking and Ritual to Preserve Omnipotence" *Diseases of the Nervous System,* VIII(1947), 155-159
76 Wolberg, Lewis R *Hypnoanalysis* New York Grune and Stratton, 1945
77 Wolf, S and Wolff, H G "Psychosomatic Aspects of Peptic Ulcer" *Scope,* II(1946), 4-9

CHAPTER SEVEN

THE FUNCTIONAL PSYCHOSES

General Introduction to the Psychoses (Both Functional and Organic) · Schizophrenia · Paranoid Disorders · Manic-Depressive Reactions · Involutional Melancholia



Drawing in a self-made picture book by a schizophrenic patient (hebephrenic)

In psychotic disorders, the patient manifests severe personality decompensation and a marked distortion and loss of contact with reality He is unable to relate himself effectively to other people or to his work, and usually has to be hospitalized Thus, in general, the psychoses are much more severe and disabling than are the psychoneuroses. However, it may be re-emphasized that there is no sharp dividing line between these two disorders, rather we find the neuroses blending imperceptibly into the psychoses with increasing degrees of personality disorganization or decompensation (See page 233.)

The term *insanity* is frequently used in referring to psychotic patients This is a social and legal term rather than a medical one and merely implies mental disorder so severe that the individual is judged to be unable to manage his affairs properly and to perform his social duties and responsibilities.

It has been estimated that there are some 1,000,000 psychotics in the United States Of these, about two thirds are hospitalized in state, veterans', county, city, or private hospitals The remainder are cared for at home for one reason or another

Are psychoses on the increase? We have noted that mental patients (mostly psychotics) occupy almost one half of all the hospital beds in the United States This figure is somewhat misleading, however, as psychotic patients may be hospitalized for a year or more, whereas nonpsychiatric patients are hospitalized on the average for only about eighteen days Were patients in general medicine hospitalized for an equivalent period, they would occupy about twenty times as many beds as do the mental patients.

As we pointed out in Chapter 1, while the population has increased about 3 times since 1880, the number of patients in mental hospitals has increased some 17 times This is primarily due, however, to increased hos-

pital facilities, to changes in public attitudes toward mental illnesses so that patients are not as reluctant as they once were to receive treatment, and to marked increases in the mental disorders of old age. In fact, the incidence of certain psychoses, such as schizophrenia, has apparently remained constant for many years, while paresis and manic-depressive psychoses have actually shown a decrease (Page and Landis[70]) However, the increased incidence of old-age psychoses accompanying the increased longevity of our general population has more than made up for decreases in other areas Thus the long-range trend in psychotic disorders apparently involves a slight but continuous increase (Menninger[60])

Numerous studies have been carried out in an attempt to correlate psychotic disorders with factors such as age, sex, intelligence, marital status, occupation, and urban or rural residence

1. Age. The median age of all first admissions to mental hospitals approximates 46 years. However, there is wide variation in the age at which specific psychoses tend to occur Schizophrenia is most apt to occur during early adulthood, general paresis during middle adulthood, and senile psychoses during later life For psychoses in general, the age range is wide. psychotic cases have been reported before the age of 5 and after the age of 80

2. Sex. Males outnumber females among the first admissions to mental hospitals in about the ratio of 4 to 3 However, the females outnumber the males in several diagnostic groups, such as manic-depressive, involutional, and senile psychotic reactions

In view of the fact that women, on the average, live about seven years longer than men, it is not surprising that women outnumber the men in senile reactions Their predominance in involutional and manic-depressive psychoses is probably in part due to cultural stresses to which women are particularly exposed We shall endeavor to bring out these factors in our later discussion of involutional and manic-depressive reactions.

3. Intelligence. Mental illness is no respecter of level of intelligence, and psychotic disorders are found among geniuses as well as among the mentally deficient. In general, the range of intelligence and educational background is the same in psychotic patients as among the general population.

There are certain group differences among patients showing the different types of psychotic reactions For example, paranoids, as a group, seem to be brighter and better educated than schizophrenics or paretics However, there is much overlapping, and in addition, the intelligence level may be markedly affected by the progression of the disease, as a result of brain damage and personality deterioration. Consequently, it is not feasible to make too rigid comparisons of different psychotic reaction types in terms of intelligence, since available statistics are in general based upon measurements made only after the onset of the disease

4. Marriage. Married persons appear to be considerably less susceptible to the development of psychotic disorders than the widowed, single, and divorced But this is not to say that being married is necessarily a factor in preventing mental illness Clearly, several other factors are operative here too Unstable, maladjusted persons are less acceptable as mates and for this reason probably are not so likely to marry as are more adequately adjusted persons Also, such persons are frequently so preoccupied with their problems that they do not marry from choice Even where they do marry, their instability and maladjustment may make the marriage relationship more stressful than security-giving In addition, statistics based on admissions to hospitals may give a somewhat fallacious picture of comparative incidence, for mentally ill persons who are married may often be cared for at home, whereas single persons are more likely to be cared for in hospitals

Over and above all these factors, however, the individual's stress tolerance is undoubtedly strengthened by the teamwork, group

identification, and mutual emotional support received in a healthy marriage Family life brings interesting and stable social relations, and thus can alleviate feelings of isolation and individual helplessness, and child-rearing brings self-obliterating responsibilities and duties and the feeling of being needed Children also provide normal and healthy interests as well as greater security for the crucial period of old age It goes without saying, of course, that unhappy marriages may materially increase the individual's stress burden, and favor the development of mental disorders But in general, marriage is apparently a stabilizing influence, both improving adjustive capacity and protecting the individual from certain stresses the single person meets

5. Occupation. Psychotic reactions are found among all occupational groups, but there is little information available with respect to the relative incidence of particular types of psychotic reactions in specific professions Fuson[31], in an analysis of the occupations of 1496 male first admissions to Kansas State Hospitals, found more schizophrenia in "lower" socioeconomic occupational groups and relatively more manic-depressive psychoses in the "upper" Additional studies would, in all likelihood, yield interesting information, particularly with respect to popular beliefs about the higher incidence of psychoses among writers and other similar beliefs, which have so far been unauthenticated

Within a given occupation there is, of course, a wide range of psychopathology In a study of psychiatric disorders in forty male teachers with mental disorders, Allen[1] found schizophrenics, manic-depressives, alcoholics, psychopaths, involutional melancholics, and a variety of psychoneurotics

6. Urban-rural. In terms of their relative populations, urban areas contribute twice as many first admissions to mental hospitals as rural areas These figures, too, are somewhat deceiving The mentally ill in rural areas are more apt to be cared for by their families; in addition, a mental illness which is quite apparent and handicapping in city life may be unnoticed in the country or tolerated as long as the individual is able to do his work.

In general, however, it appears that cities do have slightly higher rates than rural areas for psychoses, as for other abnormal behavior However, there are so many complicating factors here that we shall have to await further evidence before we can adequately evaluate this difference

7. Racial-group differences. Psychotic reactions are found among all races and all social groups Nevertheless, the types of abnormal behavior found may vary considerably from one group to another In certain societies crime is practically nonexistent Suicide rates vary greatly, and in certain groups suicides are extremely rare. Schizophrenia and other functional psychoses are also reported to be practically nonexistent in certain primitive groups Similarly, alcoholism is extremely rare among the Jews, whereas it is relatively common among the Irish However, since the socio-cultural conditions vary so greatly from one racial group to another, and since there tends to be a narrowing or disappearance of racial differences when socio-cultural conditions approach equality, it appears that most variations in abnormality between racial and socio-cultural groups in different parts of the world are due to differing conditions of life rather than to differences in racial biology (Dhunjiboy[23]; Faris[29]; Klopfer[55], Lopez[62]).

CLASSIFICATION AND SYMPTOMS OF PSYCHOSES

Psychotic symptoms may originate from either psychological stresses or organic brain pathology or from the interaction of both For this reason psychotic disorders are divided into two general categories—*functional* and *organic* psychoses—depending on whether or not there is some demonstrable associated brain pathology. The functional

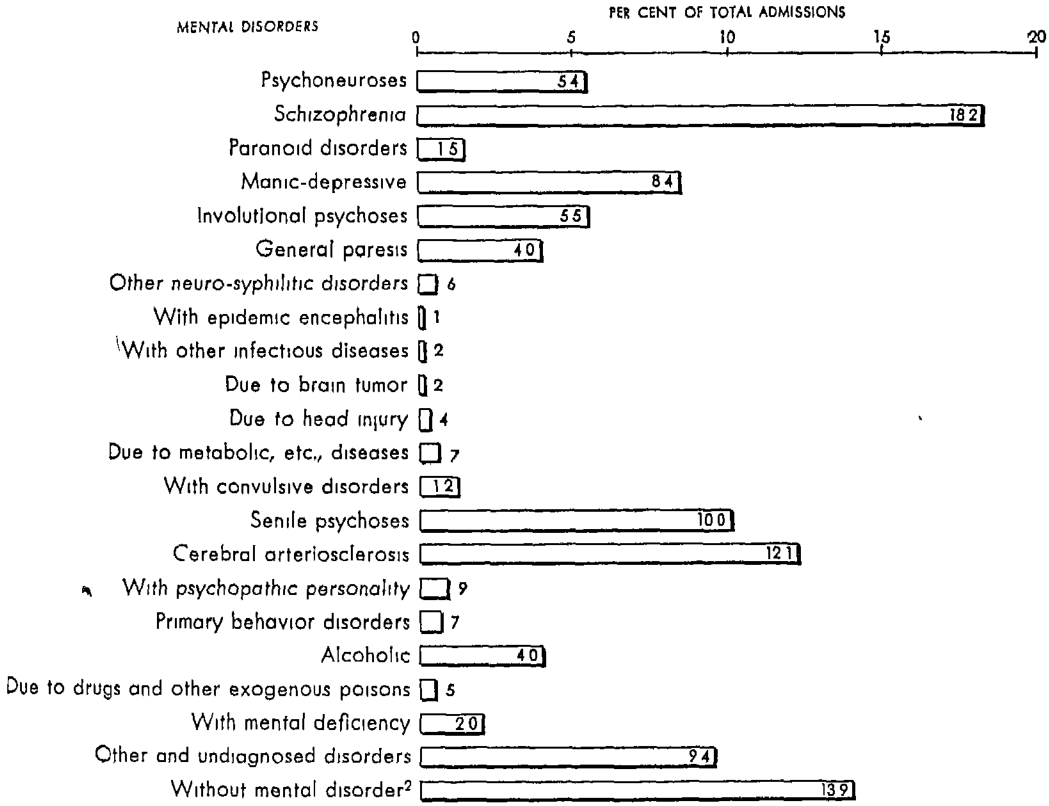
psychoses are in turn divided into three main groupings or types

1. *Schizophrenic disorders,* a group of psychotic disorders in which there is a strong tendency to retreat from reality, with emotional "blunting" and disharmony and m . . . . . . ch processe . . . stereotypies are common There are six sub-groups included under schizophrenic disorders latent, simple type, hebephrenic type, catatonic type, paranoid type, and unclassified.
2. *Paranoid disorders,* in which the patient (a) has delusions, usually of persecution and/or grandeur, but maintains in other respects a relatively intact personality structure or (b) manifests a transient paranoid state with delusions and hallucinations but without the bizarre deterioration of paranoid schizophrenics.
3. *Affective disorders* As the name implies, these disorders involve extreme fluctuations in mood, together with related disturbances in thought and behavior There are three major sub-groupings here manic-depressive reaction, psychotic depressive reaction, and involutional melancholia

The term *organic psychoses* is rather misleading inasmuch as this general category includes a variety of nonpsychotic as well as

FIRST ADMISSIONS TO MENTAL HOSPITALS IN 1947

(Total first admissions for the year—135,395)



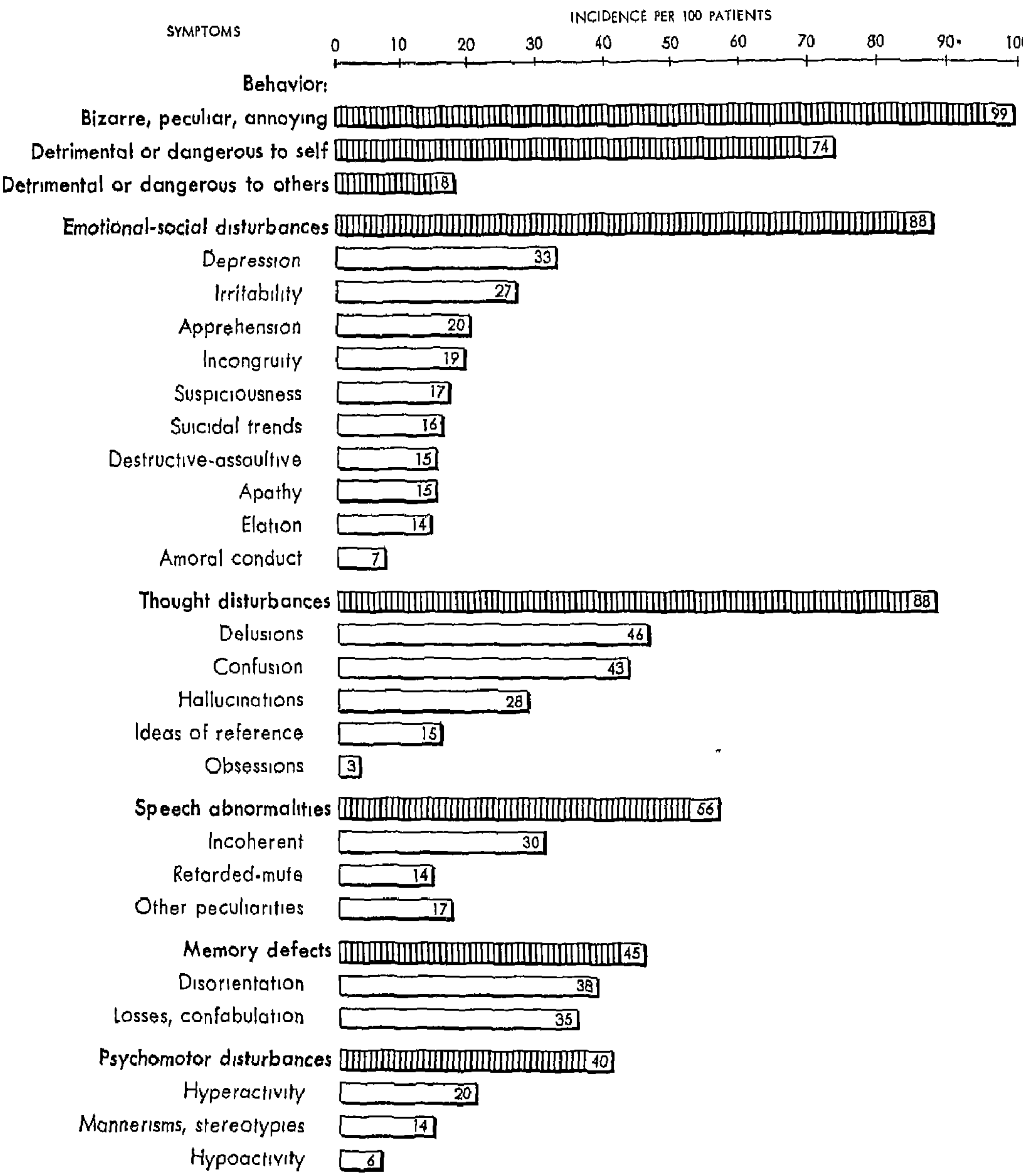
[1]Statistics based on reports from 197 state hospitals, 6 receiving hospitals, 93 county hospitals, 197 private hospitals, and 10 other psychopathic hospitals, compiled b States Public Health Service

[2]This category includes cases of alcoholism, drug addiction, epilepsy, etc, without psychosis

psychotic symptoms associated with organic brain pathology. The major sub-categories are disorders associated with (1) infectious diseases of the brain, (2) brain tumors, (3) head injuries, (4) toxins and metabolic disturbances, (5) degenerative diseases of the nervous system, (6) epilepsy, and (7) senile and arteriosclerotic brain damage.

Although each of the psychoses has certain unique symptoms, there are many symptoms which may occur in almost any of the functional or organic psychotic reactions This will be evident from a study of the chart below[81], which represents an analysis of symptoms based upon 500 consecutive admissions to a mental hospital In order to achieve some

SYMPTOMS IN 500 CONSECUTIVE ADMISSIONS TO A MENTAL HOSPITAL



order in considering the array of symptoms, various divisions have been proposed. One popular division of symptoms is in terms of thinking disturbances, motor disturbances, emotional disturbances, and somatic disturbances. Although this grouping is useful for descriptive purposes, it should be emphasized that these symptoms all relate to the total behavior of the patient and may have little meaning individually.

We shall discuss the significance of the various symptoms as we take up the different psychotic reaction patterns, but it may be of value to elaborate briefly first upon two symptoms—delusions and hallucinations—which are commonly found among psychotic reactions of all types and are of considerable diagnostic and dynamic significance.

DELUSIONS

Delusions are false beliefs which the individual defends vigorously despite logical absurdity or proof to the contrary. All of us, of course, entertain frequent false beliefs based upon misinformation or prejudice. In the case of delusions, however, these false beliefs are extremely persistent and interfere seriously with the individual's social adjustment. For example, in hypochondriacal delusions the patient may be convinced that he is tainted, or emits a bad odor, or is suffering from some terrible disease, or he may insist that his head is turning to glass, or that his stomach is corroding, or that his brain is being eaten away. Among the more common delusions found in psychotic reactions are:

1. *Delusions of sin and guilt*—delusional beliefs about having committed horrible and unforgivable sins which have brought calamity to others and for which the patient can never be forgiven.
2. *Hypochondriacal delusions*—delusional beliefs relating to various horrible disease conditions, such as emitting bad odors, "rotting," and being "eaten away."
3. *Nihilistic delusions*—delusional beliefs that nothing exists. Patient may insist he is living in a "shadow world" or that he died several years ago and now only his spirit in a sort of vaporous form remains.
4. *Delusions of persecution*—delusional beliefs of being deliberately interfered with, discriminated against, plotted against, threatened, and otherwise mistreated.
5. *Delusions of reference*—delusional beliefs that other people are talking about him, referring to him, portraying his life in cartoons, movies, on television, or otherwise making references to him in their activities.
6. *Delusions of influence*—delusional beliefs that "enemies" are influencing him in various ways, perhaps via complicated electrical gadgets which send out waves that interfere with his thoughts or pour "filth" into his mind.
7. *Delusions of grandeur*—delusional beliefs that patient is some great and remarkable person, such as a great economist, physicist, or religious savior. The patient may identify himself with some great historical figure such as Jesus.

The degree of delusional systematization may vary from the fragmentary disorientation accompanying delirium to the logically consistent delusional system of the paranoiac. Delusions commonly center around sexual and religious topics and around ideas of personal worth. Most psychotic delusions are silly and illogical, though in some cases paranoid delusions may on first acquaintance be quite convincing. The origin of delusions and their definite ego defensive value will become apparent in our subsequent consideration of the various psychotic reaction patterns.

We may note in passing, however, that many delusions grow out of elaborations of our ego defense mechanisms. We have previously observed that most of us are prone to project the blame for our mistakes upon others, and it is only an additional step to excuse our failures by insisting that we have not been given a fair chance—that other people are "working against us." Similarly, we may project our own unacceptable desires to other

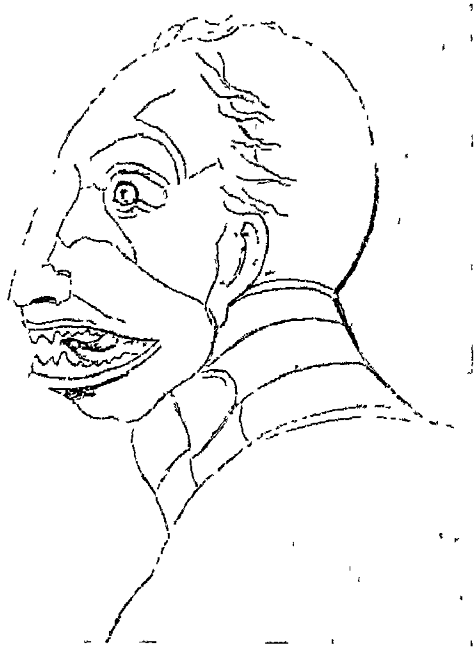
people so that it is they who are trying to kill us, while our thoughts remain pure and quite devoid of any hostility

HALLUCINATIONS

In hallucinatory reactions, the patient perceives various kinds of strange objects and events without any appropriate "external" sensory stimuli He may hear voices telling him what to do or commenting upon or criticizing all of his actions Occasionally messages are received from God or from some organization, telling the patient of great powers that have been conferred upon him or of his mission to save mankind

In some instances the voices are ascribed to specific persons such as God, some relative or friend, or "enemies" In other cases the patient insists that he has not the vaguest idea as to the identity of the person or persons

"Ghost of a Flea," based on a hallucination portrayed by William Blake According to Blake, this flea was in the room and told him that fleas contained the damned souls of bloodthirsty men Blake, in both his poetry and his etchings, gave many evidences of schizophrenic and paranoid ideation and religious delusions (Born[12])



talking Similarly, the voices may be well localized—they may come from the radiator, or the window, or an imaginary telephone receiver, which the patient holds to his ear—or they may seem to come from all directions and to be all around the patient

Although auditory hallucinations are most common, visual, olfactory, gustatory, and tactual hallucinations also occur. The patient may see angels in heaven, or smell poison gas that has been ejected into his room, or taste the poison in his food, or feel small bugs crawling around under his skin

Hallucinations may result from a variety of biological and psychological conditions. Among the former are extreme fatigue, the use of drugs, delirium accompanying fever, and organic brain pathology. Even where such biological conditions obtain, however, the personality of the patient usually plays an important role in the development of hallucinations This is brought out in Good's[43] description of the behavioral condition of five survivors from a sunken ship who spent fifteen days adrift on a raft Although all of these survivors reported periodic irrational thoughts while adrift (the most common being that they could walk off the raft upon the water), only one of the survivors showed such a severe reaction to the exhaustion and exposure that he turned from the rescuers to talk to an imaginary person

The elaboration of projection, wishful thinking, and other ego defense mechanisms may lead to hallucinations as well as to delusions Probably most of us talk to other persons in fantasy and conjure up their replies In dreams this process is quite vividly illustrated Thus it is not surprising that individuals intensely preoccupied in fantasy with their conflicts and problems should sometimes find these voices and events so real that they seem to come from external sources Sherman[93], for example, concluded from a study of 19 children who experienced hallucinations, that the hallucinations were a simple projection of some mental difficulty and took the

form of either an explanation or a compensation for the difficulty. One child who had a strong conflict between a tendency to conform and a tendency to rebel saw a person on each side of him saying "Be good," or "Be bad." These persons were further elaborated through symbolic fantasy so that one became a "good man" and the other "the devil." The hallucinations of many psychotic patients appear to follow a similar pattern.

GENERAL ETIOLOGICAL CONSIDERATIONS

The etiological factors in the development of psychotic disorders are not as well worked out as those in the psychoneuroses, and there is considerable difference of opinion in this field, particularly in regard to the functional psychoses. Some investigators emphasize heredity and constitutional factors, whereas others place their major emphasis upon psychological and sociological factors. In the present section, in our search for the causative factors which underlie psychotic reactions in general, we shall confine our attention largely to the factors observable in the functional psychoses, where there is no correlated brain pathology to which one can attribute the disorder. We shall find that psychotic reactions, like any other behavior, are a function of (1) the individual's adjustive capacity and (2) the stress situation. Thus many of the same dynamic factors will apply to both the functional and the organic psychoses, and where there is brain pathology, it acts not so much to "cause" psychoses as to lower adjustive capacity and constitute a severe stress. Whether a psychosis develops will depend on how much adjustive capacity he had to begin with and what other stresses his life situation contains.

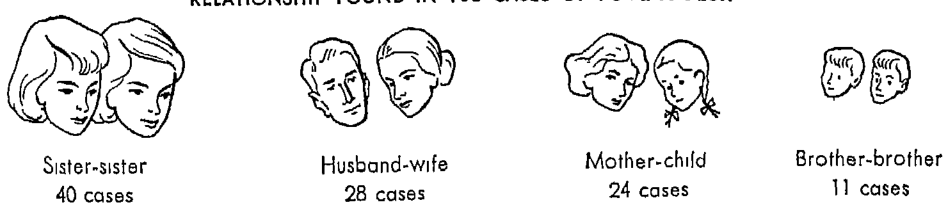
BIOLOGICAL FACTORS

Even though there is no known organic pathology underlying the functional psychoses, a wide range of biological conditions have been championed as causative factors.

Heredity. Genetic inheritance in some form has been heavily emphasized. In Chapter 4 we examined the evidence from twin and family history studies relative to the role of heredity in abnormal behavior. In the light of this evidence we concluded that mental illness does not follow any simple dominant or recessive Mendelian ratio. Since most studies of genetic factors have been concerned with schizophrenia and manic-depressive reactions, we shall wait until our discussion of these disorders to evaluate further the implications of these findings.

A relatively neglected phenomenon which casts some light upon hereditary and environmental considerations in the functional psychoses is that of *folie à deux,* which refers to the transference of delusional ideas or abnormal reaction patterns from one person to another. This phenomenon is in no sense comparable to contagious diseases, but is a type of personality reaction in which one person tends to copy and incorporate into his own personality structure the delusions or other abnormal patterns of another person. *Folie à deux* is found in persons in close and prolonged personal contact, even without blood relationship. In an extensive analysis of 103 cases Gralnick[35] found varying relationships as illustrated below. He empha-

RELATIONSHIP FOUND IN 103 CASES OF FOLIE A DEUX



sized the following explanatory factors, all environmental: (1) length of association, (2) dominance-submission, (3) type of familial relationship, (4) pre-psychotic personality, and (5) homosexual desires. The high incidence in the husband-wife category is particularly striking, since it is the one relationship in which heredity could not have been operative as a causal factor.

Constitution. Many investigators have thought heredity might work through some sort of constitutional predisposition to mental illness such as has been found for tuberculosis, diabetes, cancer, and other physical ills. Radzinski's[86] studies of constitutional factors led him to the conclusion that functional psychoses are based upon a malfunctioning of the brain, resulting in a poorly developed emotional equipment and deficient emotional resistance. Blood type, endocrine organization, and other constitutional factors have also been emphasized, but the exact part they play in the total pattern is not yet clear (Peterson and Reese[83]). Nor has it ever been experimentally established that particular types of mental disorders are causally associated with particular types of physique, despite the studies and claims of Kretschmer[58], Sheldon[92], and others.

Perhaps the most crucial evidence for the importance of constitutional factors in the etiology of psychotic disorders is evidence of the type contained in Escalona's[27] report of an intensive study of 17 psychotic children at Children's Division of the Menninger Clinic. The following is a summary of patterns found to be outstanding in the development of these disturbed children.

1. Atypical and irregular development since earliest infancy. In all cases mental functioning appeared to be uneven, with spotlike areas of accomplishment way above and way below what would appear to be the average or most representative level of mental functioning for the particular child. For example, some walked unusually early but were slower in talking.

2. Disturbances in the earliest and most basic interpersonal relationships. Early feeding difficulties, resistance to weaning, sleeping disturbances, traumatic toilet training—all the familiar landmarks of infantile maladjustment cropped up with monotonous regularity. Furthermore, mothers and other persons in close contact with these children felt that there had been something "puzzling" and "different" about them from an early age. In this respect Escalona was impressed by the atypical and pathological reactions of the children to perfectly ordinary maternal attitudes and to the inevitable daily routine. A baby who will not eat when food is offered, who cries when he is expected to sleep, who is incessantly active or pathologically lethargic, who reacts with panicky resistance to routine procedures such as bathing or being dressed, and who rarely provides for the mother the emotional gratification that comes from having the baby respond to her positively cannot help but be upsetting to even the most loving mother. Finding the usual methods of baby care unsuccessful with their atypical children, these mothers will, of course, "try everything" and thus go to extremes in both strictness and indulgence. They will seek and receive contradictory advice and act upon much of it, and when we come along to take a developmental history it is found that the child has been managed inconsistently. After years of more or less unsuccessful attempts to manage the child effectively, feelings of ambivalence and guilt must of necessity develop in mothers of such children, and the presence of such maternal attitudes is apt to lead the therapist to think of the disturbed mother-child relationship as the cause of the child's illness. It seems possible to the writer that we may sometimes be confusing end-results with causes. Therapeutic programs might at times be modified if these early developmental disturbances were regarded as arising in large measure from the pathology within the child rather than from parental attitudes per se. With this assumption the disturbed mother-child relationship will still be regarded as an important etiological factor in that it creates an unfavorable psychological at-

Principal Differential Factors Between Psychoses and Psychoneuroses

FACTOR	PSYCHONEUROSES	PSYCHOSES
General behavior	Mild degree of personality decompensation, reality contact impaired but patient not incapacitated in social functioning	Severe degree of personality decompensation, reality contact markedly impaired, patient incapacitated in social functioning
Nature of symptoms	Wide range of psychosomatic complaints but no hallucinations or other markedly deviate behavior	Wide range of psychosomatic symptoms and complaints with delusions, hallucinations, and other severely deviate behavior
Orientation	Patient rarely loses orientation to environment	Patient frequently loses orientation to environment
Insight	Patient often has some insight into nature of his behavior	Patient rarely has insight into nature of his behavior
Social aspects	Behavior rarely injurious or dangerous to patient or to society	Behavior frequently injurious or dangerous to patient or to society
Treatment	Patient rarely needs institutional care, psychotherapy usually all treatment necessary	Patient usually requires institutional care, shock and other somatic therapies in addition to psychotherapy frequently necessary

Adapted from Thorpe and Katz[100]

mosphere in the home, but will be viewed as a by-product of the total maladjustment picture (Adapted from Escalona[27], pp 127-128)

The following case of a schizophrenic boy whose treatment began during his tenth year and who at age twelve showed definite signs of mental deterioration, again suggests that constitutional pathology as well as disturbed social relations seems to be directly involved in the etiology of psychotic behavior, at least in children.

This boy "surprised us not only by his extreme dependence upon the therapist (he used to say in a manner far from bland, 'You have to be here so I can be happy'), but by flashes of rare insight. This withdrawn, deluded child, who gave the appearance of feeble-mindedness and was out of contact with his environment much of the time, said on one occasion when he discussed the reasons for his institutionalization with the therapist, 'Nobody can really help me I don't like anybody, not even my mother Doctor—— (mentioning his previous therapist) liked me and tried to help me and you like me but you can't help me I don't love anyone, I want to kill everybody.' Immediately afterwards he lapsed into rambling incoherent talk centering on one of his longstanding preoccupations and never mentioned the matter again It is of interest that the matter of this child's capacity for affection had not been mentioned to him previously This boy, like several others, aroused deceptive hopes in his therapist by apparent good clinical improvement contingent upon daily contact with the therapist He gave up much of his fantasy life, or at least no longer expressed it openly, he resumed school work, and entered into friendly contacts with children and adults—all accomplishments of which he had been thought incapable The important point here is, however, that a short separation from the therapist caused a complete relapse, and that he at no time developed even a minimum of tolerance for any frustration whatsoever" (Escalona[27], pp 131-132)

On the basis of these findings, Escalona holds that "illness of psychotic degree occurring in early childhood, is associated with severe developmental irregularities beginning at earliest infancy, as well as with profound disturbances in the relationship between the child and his parents" (p 133)

Although studies such as that of Escalona are particularly significant in leading the way toward the assessment of constitutional factors in psychopathology, we can only conclude at present that constitutional factors do appear to be important. Unfortunately, our recognition of this fact will be of limited value until we are better able to delineate their specific role in the total interactional pattern of stresses and predisposition

PSYCHOLOGICAL FACTORS

Among the psychological factors which seem to play a major role in the development of psychoses are faulty parent-child relations, trauma, frustration, and conflict

Parent-child relations. The exact role of various parent-child and other social relationships in the development of psychotic reactions is not clearly understood Apparently, however, rejection, excessive conscience development, overly severe discipline, overprotection, rigid sexual morals, chronic insecurity, and inconsistent discipline are some of the more important family conditions which predispose a child to the development of later psychopathology In a study of the psychoses of children, Yerbury and Newell[109] emphasize the total lack of security in human relationships, the disturbed home life, the beatings and brutal treatment the children had experienced, and the hatred many of them bore toward their parents Many of these children were also found to be burdened with excessively high standards, leading to conflicts and feelings of inferiority, guilt, and inadequacy.

Apparently the effect of these undesirable parent-child relations is to prevent children from developing the ability to achieve satisfactory psychological adjustments to stress T[illegible] f course, result par- [illegible] inadequacies and may in turn reinforce any constitutional weakness, in any event, the final result is a psychologically handicapped person. As Escalona[27] points out in her report on psychotic children,

"One may say that they present a large variety of behavior pictures which in all cases lead to a generalized and far-reaching inadequacy on the part of the child This inadequacy, whatever form it took, made it impossible for these children to cope with whatever life situations are

ordinarily appropriate at a given age and under given environmental circumstances" (p 128)

However, the question still remains as to how one child is seemingly able to surmount undesirable early conditions while another under comparable conditions becomes a psychotic casualty. Again the possibility of constitutional inadequacies reinforced by undesirable psychological factors appears relevant.

Trauma, frustration, conflict. Many individuals, though psychologically handicapped by faulty parent-child relations, manage to make successful adjustments in childhood and later life, as, for example, in cases where there is no severe trauma from social and other environmental experiences and where the life situation does not involve severe and prolonged conflicts. But in instances where the child's early experiences are severely traumatizing and where severe conflicts centering around sex, hostility, dependency-independency, and self-acceptance are aroused, the outlook is not so favorable

Since trauma, frustration, and conflict play such important roles in psychotic reactions, as well as in other types of psychopathology, we shall consider their specific significance in some detail in our discussion of the various psychoses We may emphasize in passing, however, that early experiences which lead to faulty environmental and self-evaluations predispose the individual to the development of later psychopathology, in the face of either biological or psychological stress.

SOCIOLOGICAL FACTORS

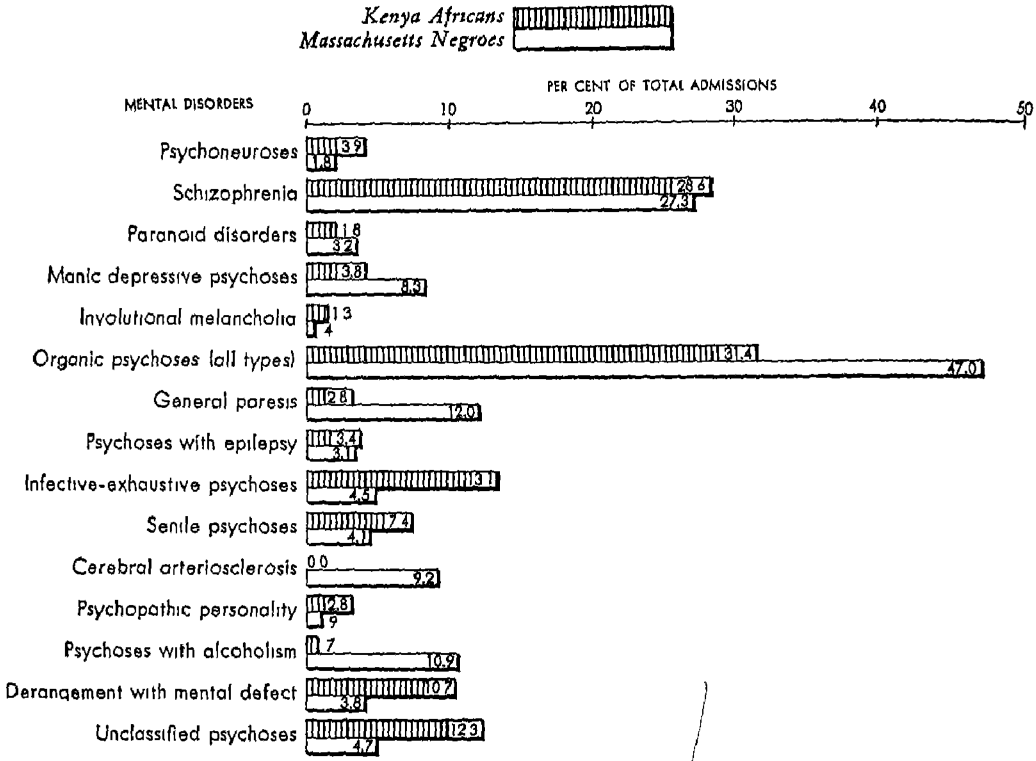
The role of general socio-cultural conditions in the development of psychotic reactions is even more obscure, if possible, than are the roles of the biological and the psychological factors In general, it appears that sociological processes affect the development of psychoses in three ways (1) in terms of the content of symptoms, (2) in terms of actual incidence, and (3) in terms of the particular types of psychotic reactions that develop

Symptom content. The content of symptoms inevitably varies to a large extent in terms of cultural factors The African may think a particular witch doctor is trying to bewitch him whereas the American may think the F.B I is after him. Similarly, the American with delusions of grandeur may think he is Jesus Christ, whereas the Russian may think he is Lenin and the Arab, Mohammed But despite differences in the specific content of symptoms, the various types of psychotic disorders (schizophrenia, manic-depressive reactions and so on) are highly similar in general symptom picture in different social groups

Incidence. The precise effects of particular socio-cultural conditions upon the incidence of psychotic reactions are by no means completely clear. Several investigators, following the lead of Faris and Dunham[30], have found a decrease in the incidence of psychopathology, including psychoses, from the center of large cities out to the more exclusive residential districts In a particularly pertinent study Hyde and Kingsley[41] correlated the mental disorders of 60,000 selectees rejected at the Boston Armed Forces Induction Station with the socio-economic level of the community from which the selectees came. They found that the total incidence of major mental disorders increased gradually from 7 3 per cent in communities with the highest socio-economic status to 16 6 per cent in those with the lowest Although there does thus appear to be a higher general incidence of psychotic disorders in the lower socio-economic levels, the difference is more pronounced in certain disorders, such as schizophrenia, whereas certain others seem to be distributed fairly evenly throughout the general population

The incidence of psychotic disorders has also been found to vary considerably from one socio-cultural group to another, but the explanation of this finding is not a simple one Beaglehole[4] found a lower incidence of psychoses among New Zealanders than among Europeans for the years 1925-1935 In general, it would appear that primitive societies do

VARIATIONS IN PSYCHOTIC DISORDERS BETWEEN KENYA AFRICANS AND MASSACHUSETTS NEGROES



not have as high rates of psychotic disorders as European and American groups However, as these primitive societies are progressively exposed to Western civilization, the rate of mental illness, particularly schizophrenia, increases until such group differences are all but obliterated (Dhunjiboy[23], Lopez[62]) *

In a recent report, Carothers[18] found a rate of only 3 4 new admissions per 100,000 per year in the British tropical colony of Kenya as compared with a rate of 161 per 100,000 each year among Negroes in the state of Massachusetts † The chart above gives the comparisons he found in first admissions for the principal types of mental disorders

Types of psychotic reactions. There are rather wide group differences not only in the general incidence of psychotic disorders but in the types of psychotic reactions which occur and even in the symptomatology and dynamic patterns of the common disorders as they appear in different cultures The chart on pages 238-239 shows some of the differences which Carothers found between African and American Negroes in several of the mental disorders that occur in both cultures. Although he makes no attempt to minimize the importance of hereditary factors, he shows systematically how the differences can be explained in terms of socio-cultural varia-

* Generalizations concerning the incidence of mental disorders among primitives are somewhat open to question because of the difficulties involved in applying Western diagnostic and other psychiatric concepts to primitive peoples (Demerath[21])

† Carothers' figures are based on 558 first admissions of mentally deranged Kenya Africans to the Mathari Mental Hospital between 1939 and 1943 inclusive and on figures for American Negroes in the state of Massachusetts from 1917 to 1933. His assumption that these are typical of American Negroes in general is, of course, somewhat open to question in view of the cultural variations within the United States

tions He stresses the rigid social organization in which each member in the Kenya culture has a definite place and role and knows exactly what is expected of him under all situations and at each period in his life Status is determined by age rather than by ability or achievement; all women are married and are under the protection of the men

Of perhaps greatest significance psychologically is the fact that their behavior in all its major aspects is group-determined, rather than a matter of individual choice Even religion is a matter of offerings and invocations in a group; it is not practiced individually and does not demand any particular attitude on the part of the individual Motives are social, rather than individual, and as a result the individual feels none of the sense of personal responsibility which is at the core of our Western attitudes toward our own behavior. He receives utter stability and security because he is part of a larger organism, and in the absence of individual responsibility does not suffer the self-devaluation which plays such a large part in the development of mental disorders in our culture. He does not set himself unrealistic goals, and he has no need to repress or feel guilty about "dangerous" desires. His culture actively discourages individualistic achievement or success

In addition, the Kenyan feels a great humbleness toward his natural environment, which is often harsh in the extreme He always expects the worst, and hence can accept misfortunes with equanimity Here too, responsibility and blame are automatically placed on forces outside oneself. The stress, though often severe, is thus without ego-involvement, and hence without anxiety, tension, or need for ego defensive measures.

Needless to say, Carothers does not argue for the superiority of the Kenyan culture. Apparently it is not the particular social rules and customs which are important here so much as the fact that basic physical and psychological security and need satisfactions are assured, and members do not experience feelings of inferiority or isolation Any sociocultural milieu in which these factors would obtain would presumably show the same comparative freedom from mental disorders. Carothers concluded that the inherited tendencies of the Africans were "probably not very different from the Europeans" (p 84)

One disorder fairly common to the Kenyans which is unknown in our culture is "frenzied anxiety"—a transitory period of frenzy, incoherence, and violence, precipitated by some definite cause, followed by amnesia for the attack, and sometimes replaced by hysteria Below is an example adapted from Carothers' report

The patient was a Mkamba (Bantu) man about 30 years of age Before and after the attack he seemed quite normal

One afternoon he was observed doing odd things such as picking grass and placing it on the fire, and putting stones on the cooking pot Next morning he chased his family out of the house, brandishing his bow and arrows and a hammer All escaped except his wife and youngest son, both of whom he battered to death

He had complete amnesia for the event, but later made this statement. "I would not have killed my wife and child had I not been ill, if I had not killed my wife and child I would have died All my troubles have come from an old man called X with whom I had a quarrel There was another man who wished to marry my sister and he brought beer to my father as a preliminary to the marriage X wished to drink this beer, but I refused to allow this. . . . X then said, 'You may drink the beer today but this will be the last time.' He meant that he would bewitch me and cause my death. . . ." X's threat had apparently been made about two weeks previously Two days before the crime the patient found some charms beside his door, presumably placed there by X (pp 70-71)

Carothers says of this case

"His manner is at all times mild and amenable, and he shows none of the truculence and

Special Characteristics of Mental Disorders Found in Kenya Africans

MENTAL DISORDER	SPECIAL CHARACTERISTICS IN KENYA AFRICANS	POSSIBLE EXPLANATION IN TERMS OF ASPECTS OF KENYA CULTURE
Psychoneuroses	Predominantly cases of "frenzied anxiety"	Lifelong lack of emotional control or self-criticism, combined with a great fear of death and belief that another's death will make one's own unnecessary
	Absence of anxiety neuroses in the European sense	No feeling of personal responsibility and no social, sexual, or economic problems to foster Western-type anxiety
	No obsessive-compulsive neuroses	Individual's status and role perfectly secure irrespective of accomplishment or ability No need for him to develop own standards of conduct
Schizophrenia	Predominantly hebephrenic type (50 per cent of cases)	Little need for ego defense mechanisms, hence none well developed and none to fall back on, when decompensation comes, complete personality deterioration thus more likely
Manic-depressive reactions	Complete lack of depressions	Apparently related to absence of feeling of individual responsibility and guilt
Involutional melancholia	No guilt, tendency to develop persecutory ideas to rationalize the mood changes caused by endocrine changes during this period	Apparently due to absence of feeling of personal responsibility and lifelong habit of looking outside oneself for causes of all misfortune

Old-age psychoses	No cases of cerebral arteriosclerosis seen	No rush or tension to foster high blood pressure, hence no predisposition toward arteriosclerosis
Paranoia	Much higher incidence in those away from home	Extreme inelasticity of the Kenyan's codes of behavior No techniques for adjusting to new social scene

Chart based on Carothers'[18] *report*

resentment so characteristic of aggressive psychopaths, nor has he exhibited any aggressive outbursts, although frustration must have been frequent during this period.

"Like the other cases that fall into this category he arrived at Mathari long after he had recovered his mental equilibrium, but the history is sufficiently complete to support the diagnosis of frenzied anxiety An interesting point that emerges in this case is his remark, 'If I had not killed my wife I would have died' It appears most probable from the evidence that he would have killed anyone he caught up with, and that the fact that he killed his wife was merely due to her being the last to reach the river" (p. 71)

Carothers further points out that although such episodes are very similar to the violent episodes of aggressive psychopaths, they are different in the African cases in being isolated events, not typical of the individual's behavior and not implying an ego-centered personality as they do in our culture.

INTERACTION OF FACTORS

A good picture of the interaction of biological, psychological, and sociological conditions in the development of psychotic disorders is provided for us in the previously mentioned study of 56 psychotic children made by Yerbury and Newell[109]. This extensive study, which utilized a control group of 56 normal children, gives special consideration to heredity and health, and to social and personality factors, with particular reference to early behavior patterns and to the emotional relationships of the children On the next page is a chart summarizing their findings

Biologically speaking, the authors stress the predominance of unfavorable hereditary tendencies in the parents of psychotic children in view of the large number of abnormal siblings in this group They also found that adverse prenatal factors were outstanding in the psychotic group, although the number of instrumental and difficult births was about equal in both groups

In terms of general health, the incidence of serious illness was higher in the maladjusted children and was considered by the authors to be a contributory factor in the unfavorable personality development of the psychotic children The higher economic and social standards in the control group of normal children, however, made better medical and surgical care available for them and perhaps accounts for the more damaging effects of serious illness in the psychotic children

Psychologically speaking, as we have pointed out, the authors stress the total lack of security in human relationships to which the psychotic children were subjected Many abnormal attachments to parents or parent-substitutes kept the children immature, repressed, dependent, and insecure in their social relationships. Often perfectionistic parents set up standards which were too high for their children to attain, and which led to marked feelings of inadequacy and guilt It is interesting to note, also, that the conflicts of the psychotic children centered around their violent personal relationships and sex experiences, whereas the problems of the control children were

concerned chiefly with school difficulties and social strivings.

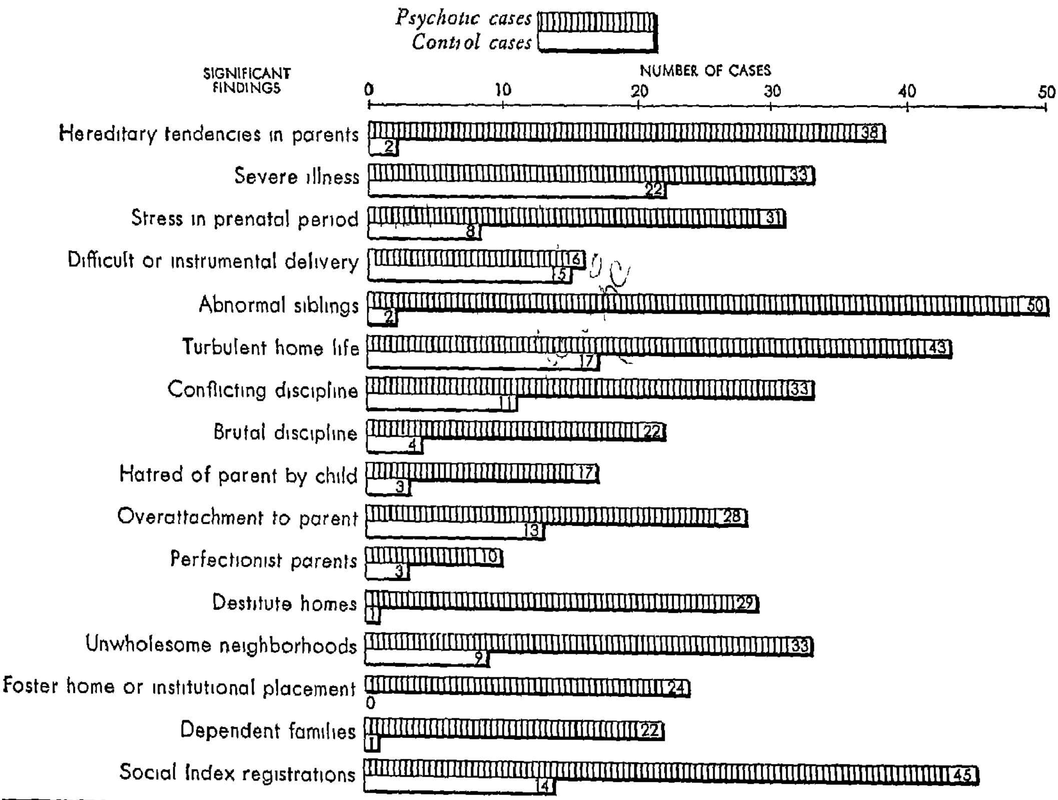
Psychic trauma was found to be a significant factor in several cases:

"Ten of them had been shocked by the deaths of parents to whom they had retained infantile attachments. Four children were so disoriented upon learning of their adoption that they could not reconcile themselves to the true situation. Four children had lived with mentally ill mothers who were finally hospitalized. Sex traumas were reported in 14 cases of children who were overwhelmed with guilt and fear regarding masturbation. Four boys had been seduced and exploited by homosexuals. Three children were horrified by incest in the home, and 3 girls had become pregnant. Five girls were obsessed with imaginary pregnancy, having had no sex instruction except from other girls. Six children had been tormented, beaten, tied and confined by their companions so that they were terrified in the company of children, and felt safe only with adults." (Yerbury and Newell[100], p. 605)

In contrast, the children in the control group had for the most part led happy, active, and well-organized lives with participation in clubs, hobbies, and other worth-while social activities.

Socially and *sociologically* speaking, the insecurity of the psychotic group was further evidenced by the large number of destitute homes, inferior neighborhoods, and placements in foster homes and institutions. Low economic status prevented many of the children from having even the necessities of life, much less providing opportunities conducive to normal development. Of the families of psychotic children, 45 had 326 registrations

COMPARISON OF BACKGROUND FACTORS IN NORMAL AND PSYCHOTIC CHILDREN



with social agencies as compared to 14 of the families of the control group, who had only 16 registrations. The latter were chiefly for assistance during the depression years.

This whole study is of importance not only in terms of giving a good interactional picture of the possible role of various biological, psychological, and social factors in the development of psychotic disorders, but also because of its many obvious implications for concrete steps that may be taken toward the prevention of mental illness.

GENERAL TREATMENT AND PROGNOSIS

Psychoses are usually treated both medically and psychologically. The medical treatment, of course, is planned to meet the needs of the particular patient and may vary from the general improvement of physical health to the fever treatment of general paresis Insulin and electro-shock are widely used in the treatment of functional psychotics, and psychosurgery is being increasingly used in the treatment of long-standing chronic cases (functional) who have not responded to less severe methods of treatment.

Wherever possible the medical treatment should be combined with psychotherapy designed to help the patient achieve insight into his condition and effect personality restructuralization along lines of increased adequacy and effectiveness In our detailed discussion of the different psychoses we shall mention the kinds of therapy that seem most effective in each case, and a more detailed discussion of medical and psychological methods of treatment will be found in Chapter 13.

Contrary to popular opinion, the general prognosis for psychotic reactions has come to be quite favorable Some 50 to 60 per cent of all first admissions to mental hospitals are later discharged as cured or improved

Prognosis varies greatly, however, from one psychotic reaction to another For example, in the senile psychoses the prognosis is unfavorable because here we are dealing with degenerative and irreversible brain pathology. Only about 10 per cent of such patients show marked improvement

In general the prognosis is more favorable for the nonorganic psychoses Taylor[98] reports that 64.2 per cent of 1234 functional psychotics who underwent shock therapy were discharged in a condition permitting return to the community Over 90 per cent of all manic-depressives recover with proper therapy. But not all functional psychoses have the same prognosis Schizophrenia and paranoia are often highly resistant to treatment.

As with cancer and many other general medical disorders, early detection and treatment are essential In general, the longer the duration prior to hospitalization or the longer the period of hospitalization without improvement, the less favorable the prognosis. Although some patients do recover sufficiently to be discharged even after ten or more years of hospitalization, most recoveries take place during the first year of hospitalization

The type of treatment also helps determine the outcome. Understaffed, poorly equipped state hospitals are frequently restricted to routine types of medical treatment. Where hospitals are well staffed and offer extensive medical and psychological therapy to their patients there is a decidedly higher rate of recovery for all types of patients

The pre-psychotic personality of the individual is a good gauge for predicting the outcome of treatment. Patients who before their illness were fairly stable naturally do not have so far to go in their "return" to normal and can be expected to respond more readily than the patients whose illness is the end result of a long developmental process of seriously deviant reactions.

So far, we have been concerned with factors that are applicable to both the organic and the functional psychotic disorders. The remainder of the present chapter will be de-

voted to an examination of the specific symptoms, dynamics, therapy, and prognosis of the functional psychoses Then, in the next chapter, we will take up the disorders associated with the several types of toxic and organic brain pathology

SCHIZOPHRENIC DISORDERS

The Belgian psychiatrist Morel in 1860 described the case of a thirteen-year-old boy who had formerly been the most brilliant pupil in his school but who, over a period of time, lost interest in his studies, became increasingly withdrawn, seclusive, and taciturn, and appeared to have forgotten everything that he had learned He talked frequently of killing his father and evidenced a kind of inactivity bordering on stupidity Morel thought that the boy's intellectual, moral, and physical functions had deteriorated as a result of hereditary causes and hence were irrecoverable. He used the term *démence précoce* (meaning "mental deterioration at an early age")

This term was later adopted by the German psychiatrist Kraepelin to refer to a group of rather dissimilar conditions which all seemed to have the common feature of mental deterioration beginning early in life. Actually, however, most of these cases do not develop during childhood or adolescence but during adulthood and there is no conclusive evidence of permanent mental deterioration Thus *dementia praecox* proved an unfortunate term.

It remained for a Swiss psychiatrist, Bleuler, to introduce in 1911 a more acceptable descriptive term for this disorder He used the term *schizophrenia* (splitting of the personality) because he thought the disorder was characterized primarily by lack of coherence in associative and thought processes, emotional blunting, and an inward orientation away from reality Unfortunately, the term *schizophrenia* implies a splitting or dissociation of the self, which is also inaccurate. Nevertheless, it has largely replaced the term *dementia praecox* in psychiatric usage

The term *schizophrenia* is now used to include a group of psychotic reactions in which there are fundamental disturbances in reality relationships and in emotional and intellectual processes. Although the specific symptoms are legion and vary greatly from one individual to another, patients have in common an apathy or indifference to the events of reality and a splitting of thought from its normal affect

The disorder usually develops slowly, often the early symptoms are not at all obvious and represent a far cry from their later malignant features. The early clinical picture is often dominated by neurotic symptoms, such as continual somatic complaints for which there is no related organic pathology At a later stage, the more important symptoms typically [illegible] ity, [illegible] gra- tion and fragmentation of thought processes, together with bizarre delusions and hallucinations, various stereotyped symbolic motor acts, and a deterioration of personal habits and moral controls

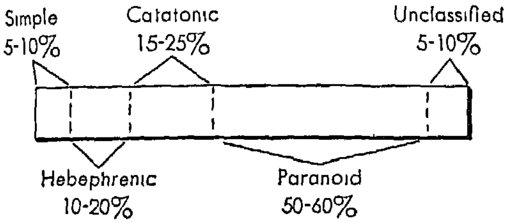
Schizophrenia is the most common of the various psychotic disorders, accounting for over 18 per cent of all first admissions to mental hospitals and some 30 per cent of all readmissions The average age at first admission is 30 years for men and 34 years for women Since many of these patients require prolonged hospitalization, they tend to accumulate in the hospital, usually constituting about one-half of the patient population Because of its complexity, long average duration, and high rate of incidence, schizophrenia has proved one of the most serious and baffling of all the psychopathological syndromes.

TYPES

In our introduction to psychotic disorders, we noted that six types of schizophrenic reaction patterns are distinguished. Schizo-

phrenics may be designated as latent, simple, hebephrenic, catatonic, paranoid, or unclassified. These patterns are not sharp and distinct but tend to merge into one another, and a given patient may show certain features of several patterns. In terms of schizophrenic first admissions to mental hospitals these reaction types have been found to be approximately as follows:

DISTRIBUTION OF TYPES OF SCHIZOPHRENIC REACTION PATTERNS



Latent schizophrenics rarely require hospitalization and so are not shown.

1. Latent schizophrenic reaction. This schizophrenic reaction type consists of individuals who have many of the symptoms found in schizophrenic reactions but to a milder degree. There may be some evidence of a "loosening" of thought processes, a slight blunting or distortion of affect, and various behavioral manifestations, such as mannerisms and unpredictable acts. Among their friends these individuals are usually regarded as seclusive, serious-minded, and rather queer and eccentric. However, they do not show severe loss of contact with reality or great personality disorganization and are able to make a marginal adjustment outside of mental hospitals. Although some of these individuals decompensate further, others maintain their marginal adjustment. They represent essentially borderline psychotic cases as shown in the following case history.

J. L. was a 21-year-old college girl who was referred for psychological help because of her disrupting influence upon a class in philosophy. In this class she insisted on making numerous comments, asking "deep" questions which were not particularly related to the topic under discussion, and otherwise annoying everyone with her persistent "contributions" to class discussions.

In her first class interview the student was conspicuous because of her close-cropped hairdo and studied sloppiness of dress. However, she appeared clean if not neat. In the course of her conversation with the therapist, she made a point of trying to appear highly intellectual and learned along cultural and scientific lines. She made it clear that she had little use for the "status quo" in any area and was particularly interested in working out some method of "salvaging" the world from its present confused state. She showed the therapist long plays that she had written around religious and philosophical themes which would help people to see the "light." The themes themselves were well written but somewhat schizophrenic in general ideational quality. Although she seemed to relate fairly well to the therapist after the first interview, she had no friends and stated that she was not interested in people but only in ideas. Actually, it became apparent that her unprepossessing appearance, awkward approach, and eccentricities tended to drive people away and left her socially isolated. This, together with various severe underlying conflicts, had resulted in a very marginal adjustment.

Her main conflicts apparently arose from early parental rejection in favor of a younger and much prettier sister who seemed always to excel the patient in every way. As a result, the patient had resorted to eccentric ways of appearance and dress in order to try to obtain some measure of attention and interest from others. From her point of view she had also failed so miserably with men—she had never had but one date in her whole life and her sister had promptly charmed him away from her—that she had renounced her femininity and tried to appear as masculine and intellectual as possible.

Although the patient was seriously maladjusted and possibly an incipient schizophrenic, her present adjustment was fairly stable and she was making a B average in her studies.

Range of Symptomatology in 100 Schizophrenics Who Recovered*

Motor disturbances (72 patients)	Impulsive hitting, screaming, stereotyped chanting (even between gulps of food), stereotyped use of words, phrases, or movement, stilted talking and walking, imitative repetition of words or motion, symbolic behavior such as attempts at self-beating or hanging as from a cross, meaningless activity, grimacing, spitting, whirling, tense and strained behavior, restless overactivity, jerking, smearing and other untidiness with excreta
Hallucinations (67 patients)	Auditory hallucinations predominant, often in combination with visual, tactile, or olfactory. Included signals, bells, music, chirpings, shots, voices cursing, accusing, ridiculing, promising, threatening Voices originated from outside the building, from the walls, the pillow, corners of the room, or from the patient's throat, abdomen, or head
Delusions (87 patients)	Delusions predominantly a projection of emotional material on the environment About half had delusions of body distortion, such as pressure, shrinking, fire, noises, emptiness, the nose hanging loose, left side being different or having electricity, of the ears being pulled through the walls, etc 39 patients had ideas of being influenced by radio, telepathy, the stars, etc., or of being able to pull down the sun or influence others in special way
Loss of contact with environment (51 patients)	Loss of ability to establish contact interrupted only at intervals through illness Most of patients able to establish a workable relationship Many able to discuss neutral topics even before delusions abandoned Excellent rapport with some soon after admission and throughout illness.
Negativism (54 patients)	Observed chiefly among catatonics Most frequently shown in refusal to eat There was also refusal to speak or enter into activities, to be fed or moved, or even to watch others being fed.
Affect (63 patients)	Expression of emotional pleasure or sadness with appropriate facial expression and manner, expression of self-accusations, sense of responsibility, punning or playfulness in contrast to mere silliness Mere laughter or crying not included

* *The chart above, based on a study by Rennie[87], shows the great range of symptoms which schizophrenics may display*

2. Simple schizophrenic reactions. In simple schizophrenic reactions, the patient evidences a gradual narrowing and waning of interests, loss of ambition, emotional indifference, and withdrawal from social relations. He no longer cares whether he passes or fails in school and is no longer concerned about his friends or family. He may show periods [illegible] and [illegible] but becomes [illegible] and seclusive. Conversation becomes scant and trivial, personal appearance and hygiene are neglected, there is little or no interest in the opposite sex, and the patient has difficulty in concentrating on anything outside of his fantasy world. He makes no effort to work or to assume responsibility and seems content to lead a simple, irresponsible, indifferent, parasitic existence.

[illegible] encouragement by [illegible] are of no avail and often lead to obstinate, negativistic, evasive behavior. But despite the patient's intellectual and emotional withdrawal, his mental functions may not be markedly impaired or disintegrated.

Although simple schizophrenic reactions are infrequent in terms of hospital first admissions, this is no doubt partly because many simple schizophrenics are able to get by outside of mental hospitals. Such persons may be cared for by their families, particularly in later adolescence and early adulthood, or they may be able to care for themselves by means of simple clerical or manual work. They usually make little or no progression in their work and resist efforts to change or complicate their routine. They usually impress others as being rather queer or stupid persons who are curiously inaccessible and isolated and seem colorless and uninteresting. Undoubtedly there are many simple schizophrenics among vagrants, prostitutes, psychopaths, and criminals.

One of our best pictures of simple schizophrenia comes from a detailed study of 64 simple schizophrenic patients made by Kant[50]. He gave special attention to six aspects:

a) *Loss of contact.* Only about one fifth showed a marked loss of superficial contact with reality. The other four fifths showed a relatively good contact with their surroundings although all but two had had delusions or hallucinations. Many patients surprised the examiner by their eagerness to be interviewed and to discuss their problems.

b) *Age at onset.* Age range varied from 12 to 40 but in over two thirds of the cases the onset of illness fell in the period between 17 and 24 years.

c) *Type of onset.* In all but 2 cases, the schizophrenic changes occurred gradually. In these 2 cases endocrine factors were considered of precipitating importance.

d) *Hereditary tainting.* In 26 patients there were family histories of functional psychoses of various types of which schizophrenia was by far the most common.

e) *Personality characteristics.* The following table shows the most common pre-psychotic personality characteristics found among these patients.

Personality characteristic	Per cent incidence
Lack of sexual adjustment	98.0
Lack of aggressiveness	87.2
Introversion	70.0
Reaching out for contact	64.8
Predominantly leptosomic physique	60.4
Shiftless workers	60.0
Subnormal intellectual functioning	51.5

The characteristic of reaching out for contact is worthy of additional comment in that many schizophrenics attempt to approach other people, but in a shy, awkward, immature way, showing marked overdependence upon parents or parental figures. Kant[50] mentions one patient who would never approach him directly but "would occasionally stand up and, with his face averted, ask the writer if he had been wanting to see him" (p. 145). One cannot help but be impressed by the need for love and affection almost pathetically evi-

dent in many of these patients, lacking as they are in adequate means of expression and apparently very much inhibited by fear

f) *Outstanding behavioral reactions at the time of onset* The following table shows the relative frequency of the most common behavioral reactions

Type of behavior	Per cent incidence
Aggressive behavior	65 0
Sexual and/or alcoholic indulgence	39 7
Pronounced disintegrative behavior	34 9
Delusional and/or hallucinatory experiences	42.9
Hypochondriacal experiences	30.2
Withdrawal (pronounced)	22 2

Aggressive behavior was manifested in either threats or attempts at assault, usually on a family member, or in the destruction of property Sexual behavior was of a crude, aggressive variety, such as attempted rape in several instances. Sexual play with children and voyeurism were also noted in several cases Sexual misbehavior and alcoholic indulgence were both considered evidence of the "opening up" of personality controls and for that reason were evaluated together All patients had shown disintegrative behavior of truly psychotic proportions, such as roaming through the streets in nightgowns

Although these observations were made upon a limited sampling of simple schizophrenic patients and may not necessarily be completely typical of simple schizophrenics in general, they do serve to give the reader a general overall clinical picture of patients suffering from this disorder.

The following interview with a patient diagnosed as a schizophrenic, simple type, will serve to bring out the emotional apathy and indifference typical of these patients without serious loss of contact with reality.

Dr. Do you know who I am?
Pt A doctor, I suppose.
Dr How do you feel?
Pt Oh—OK, I guess
Dr Do you know where you are?
Pt. It's a hospital
Dr Why are you here?
Pt I don't know. . I don't think I should be here I'm all right
Dr Where would you rather be?
Pt I don't care, just out I don't know Maybe with some fellows or something I don't care. There were some guys I used to know.
Dr. What did you do with those fellows?
Pt. I don't know—just go around.
Dr How do you like it here?
Pt. I don't know, I don't care It's all right, I guess I liked the boys though I used to know them.
Dr And you used to like them?
Pt Yes,—they were all right, I guess.
Dr. Who is "they"?
Pt Some men I don't know them by name
Dr Can you think of any reason why you should be here?
Pt. No, I'm all right. I feel all right I'd like to be with the fellows I used to know
Dr Are there any fellows here you like?
Pt I don't know They're all right, I guess
Dr Do you think the men who brought you here had it in for you?
Pt. No. They were nice to me They were all right They didn't have it in for me or hate me or anything
Dr Do you ever hear strange noises?
Pt No, I never do that I'm not crazy.

This patient was hospitalized on the complaint of his sister-in-law, who stated that he had tried to force her at the point of a gun to have sexual relations with him On admission to the hospital the patient appeared rather indifferent about the whole matter and explained that it must have been some "temporary impulse" which overcame him.

Although 30 years of age, the patient had been living with his parents and was completely dependent upon them. His educational background was good. He made an A average in high school, but during his first year of college

he lost interest in his studies and refused to attend classes despite his parents' pleadings His parents then did their best to help him achieve some vocational adjustment, but the patient seemed indifferent to their efforts and hopes for him After leaving college he did take several part-time jobs, including one in a grocery store, which he lost soon after because of his listless attitude and indifference to his duties Thereafter he would not either look for or accept work and was quite content to remain dependent upon his parents Although rather handsome, he had never gone out with girls When questioned on this subject he stated that "I'm not interested in girls. All they ever do is get you in trouble"

3. Hebephrenic schizophrenic reaction. Hebephrenic reactions usually occur at an earlier age and represent a more severe disintegration of the personality than the other types Typically the patient has a history of queerness, overscrupulousness about trivial things, and preoccupation with religious and philosophical issues Frequently he broods excessively over the dire results of masturbation and the most minor infractions of social conventions While his schoolmates are enjoying normal play and social activities, he is gradually becoming more seclusive and more given over to his fantasies

As the disorder progresses, the patient becomes emotionally indifferent and infantile in his reactions, with much silliness and incoherence of thought, speech, and action A silly smile and inappropriate shallow laughter with little or no provocation often evidence the beginning of the actual mental breakdown If asked why he laughs in this peculiar way, the patient may state that he doesn't know or volunteer some wholly irrelevant and unsatisfactory explanation Speech becomes incoherent and there may be considerable baby talk and childish giggling.

Hallucinations, particularly auditory, are common The "voices" may accuse the patient of immoral practices, "pour filth" into his mind, and call him vile names Delusions are usually of a sexual, religious, hypochondriacal, or persecutory nature and are changeable and fantastic For example, the patient may not only insist that he is being followed by enemies but that he has already been killed a number of times In some cases, the patient becomes hostile and aggressive on the basis of his belief that his enemies are using complicated electrical machines to influence his thoughts Peculiar mannerisms and other bizarre forms of behavior appear These may take the form of verbigeration, facial grimaces, talking and gesturing to oneself, sudden inexplicable laughter and weeping, and in some cases an abnormal interest in urine and feces, which the patient may smear on walls and even on his person Obscene behavior and a frank absence of any modesty or sense of shame are characteristic Although outbursts of anger and temper tantrums may occur in connection with his fantasy life, the patient is indifferent to real life situations, no matter how horrifying or gruesome.

The overall picture in hebephrenic reactions is that of a young person who has retreated from the stresses of life by regressing to a silly, childish level of behavior and by withdrawing into a fantasy world of his own, with the accompanying emotional distortion and blunting In this respect, it is interesting to note Kant's[47] conclusion that the typical inappropriate laughter and silliness serve to relieve a feeling of inner tension Both are reactions to frustration and imply a conviction on the part of the patient that any active solution to his difficulties is impossible As he abandons all resistance, there appears the happy silliness in which only the occasional impression of deliberate clowning, or a grim, ironical note to the laughter, may tell of the original conflict and the patient's vague realization of the disintegration of his own personality. The author is reminded here of a hebephrenic girl who when first brought to the hospital was markedly excited, hyperactive, and completely inaccessible She seemed

completely preoccupied with silly giggling, and showed an animated preoccupation with her fantasies and hallucinations. However, when the psychiatrist became slightly discouraged and made some deprecatory remark about her, the apparently inaccessible patient very slowly and distinctly thumbed her nose at him.

The general pattern in hebephrenic reactions is illustrated in the following interview with a hebephrenic patient. In addition to a shallowness of affect, which we saw in the case of the simple schizophrenic, the hebephrenic affect is distorted and inappropriate to the mental content. A further distinction lies in the extreme degree of personality disintegration in hebephrenic reactions.

The patient was a divorcée, 32 years of age, who had come to the hospital with bizarre delusions, hallucinations, and severe personality disintegration, and with a record of alcoholism, promiscuity, and possible incestuous relations with a brother. The following conversation shows typical hebephrenic responses to questioning

Dr How do you feel today?

Pt Fine

Dr. When did you come here?

Pt 1416, you remember, doctor (silly giggle).

Dr Do you know why you are here?

Pt Well, in 1951 I changed into two men, President Truman was judge at my trial. I was convicted and hung (silly giggle) My brother and I were given back our normal bodies five years ago. I am a policewoman I keep a dictaphone concealed on my person.

Dr. Can you tell me the name of this place?

Pt. I have not been a drinker for sixteen years I am taking a mental rest after a "carter" assignment or "quill" You know, a "penwrap" I had contracts with Warner Brothers Studios and Eugene broke phonograph records but Mike protested. I have been with the police department for thirty-five years I am made of flesh and blood—see, doctor (pulling up her dress).

Dr Who is president now?

Pt. Truman Don't you read the papers? I was raised through the facilities of the U. S. Postal Board.

Dr Are you married?

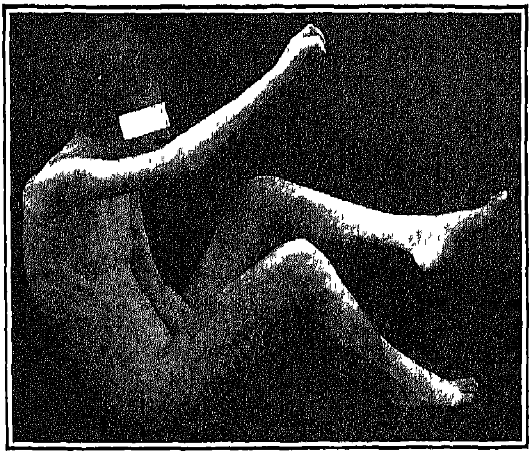
Pt. No I am not attracted to men (silly giggle) I have a companionship arrangement with my brother. I am a "looner" . . . a bachelor

4. Catatonic reaction type. Catatonic reactions often develop much more suddenly than other forms o [illegible] the patient's history usually shows the typical pattern of gradual withdrawal from reality and some degree of emotional apathy In catatonic reactions the patient typically alternates between stupor and excitement. In the stupor there is a sudden loss of all animation and a tendency to remain motionless in a stereotyped position or posture This position may be maintained for hours or even days, and the hands and feet may become blue and swollen because of the immobility

Some of these patients are highly suggestible and will automatically obey commands or imitate the actions of others (*echopraxia*) or repeat phrases in a stereotyped way (*echolalia.*) If the patient's arm is raised to an awkward and uncomfortable position, he may maintain it in this position for minutes or even hours. This is known as *cerea flexibilitas* (waxy flexibility). Ordinarily, however, in catatonic stupor the patient is extremely negativistic. He is apt to resist stubbornly any effort to change his position, and may become mute, resist all attempts to feed him, and refuse to comply with even the slightest request He pays no attention to bowel and bladder control and saliva frequently drools from his mouth Occasionally the saliva may collect in the mouth for so long that it actually becomes highly putrefactive The patient's facial expression typically becomes vacant, and the skin waxy in appearance Threats and painful stimuli have no effect, and he has to be dressed and washed, and have his eliminative processes taken care of

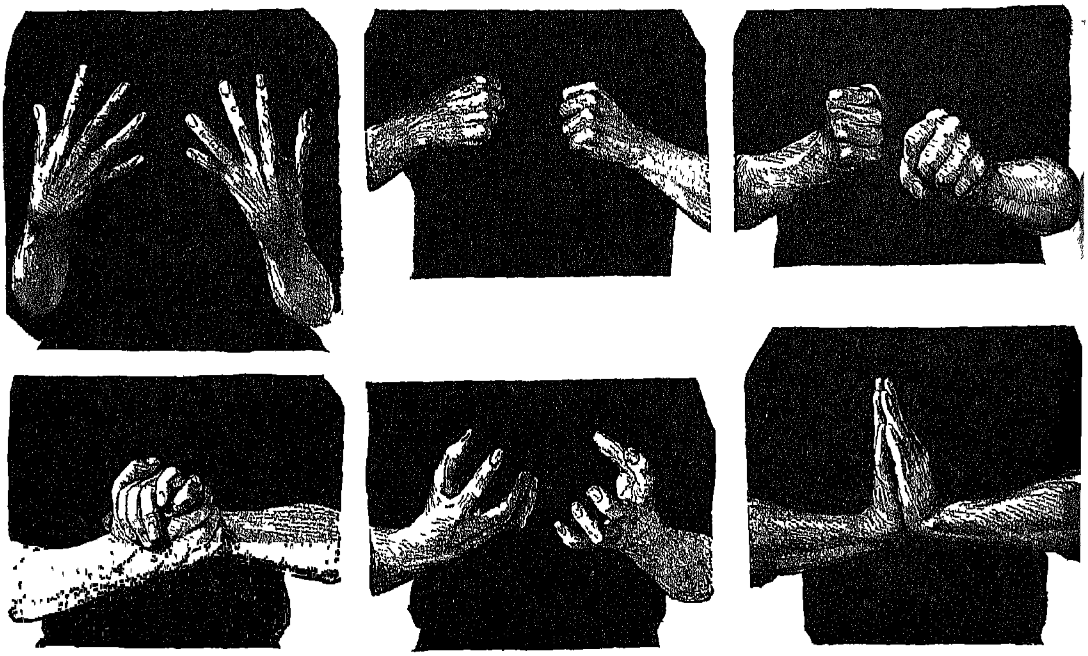
His experiences while in the catatonic stu-





The pictures left and above show the posturing of two catatonic schizophrenics, although the latter is a position particularly difficult to maintain, the patient held it for several hours

The gestures shown below are those of another catatonic patient and were found to have the following symbolic meanings the fingers spread wide depicted the Ten Commandments, clenched fists with arms tense, muscles quivering, and arms pulling apart symbolized Unity, clenched fists and lateral motion of the arms symbolized Power, hands clasped symbolized Physical Brotherhood, hands held in receptive position depicted the Spirit of God Coming In, hands held together with head bowed was position usually following that of Ten Commandments



por often involve vivid hallucinations and grandiose delusions which may explain the personal symbolic significance of his postures and behavior. It is interesting to note that despite his apparent lack of attention to his environment while in this condition, he may later relate in detail events that were going on around him

Without warning and for no apparent reason the patient may pass from this stuporous condition to one of great excitement, during which he seems to be under great pressure of activity He may talk or shout excitedly and incoherently, pace rapidly back and forth, openly indulge in sexual activities such as masturbation, mutilate himself or commit suicide, or impulsively attack and attempt to kill other persons The suddenness and the extreme frenzy of these attacks make such patients very dangerous both to themselves and to others One patient in a frenzy of excitement gouged his left eye, and while attendants were attempting to restrain him he managed to injure his right eye seriously The excitement may last a few hours or several days or even weeks

Many catatonics alternate between these periods of stupor and excitement in a manner somewhat similar to manic-depressive reactions, and it is possible that the dynamics involved in the two cases are not essentially different. Regardless of whether the patient shows an oscillation between periods of excitement and stupor or a predominance of one or the other, the prognosis is much more favorable in general for catatonics than for other types of schizophrenic reactions, particularly where the catatonic reactions have had an acute onset. This following case shows some of the typical symptoms in catatonic reactions.

On admission, the patient, a 35-year-old male, appeared apathetic and withdrawn He would answer questions only after they had been repeated several times and then his speech was so indistinct that it was difficult to understand what he said. After a period of three weeks on the ward, his behavior underwent a rather dramatic shift and he became mildly excited, heard the voice of God talking to him, and spent a good deal of time on his knees praying aloud He occasionally turned to other patients and beseeched them to "get religion" before the devil got them During this period the following conversation occurred with the ward doctor

Dr How are you today Mr. ——?

Pt. I am fighting, doctor—fighting sin and evil

Dr Sin and evil?

Pt. Yes, sin and evil You know what sin and evil are, and you should be down here praying with me for your salvation . God knows the answers He has imparted some of his knowledge to Churchill He knows but others are confused He is the true hero of the British Empire The Bible states that "By a man's actions ye shall judge him," and he is a man of action

Dr Do you feel that you have found any answers?

Pt I am fighting, doctor The devil tries to confuse you, but I am fighting Why do people die, doctor? Why did my mother have to die? That's the crucial point, how can you beat sin and evil, how can you keep from moral and physical decay? God has all the answers!

On one occasion the patient impulsively attacked another patient on the ward who had asked him if he was trying to polish the ward floor with his knees Afterwards, he blamed the devil for his behavior, stating that it was the devil who directed the attack Shortly after this incident he again became apathetic and withdrawn, refused to talk or eat, and sat in a rather awkward position for long periods of time. At this time a course of electro-shock treatments was undertaken This resulted in considerable improvement, and the patient was asked if he would like to join in group therapy He agreed, and over a period of three months participated actively in the group, showing good insight into his difficulties There was a complete remission of his symptoms

5. **Paranoid schizophrenic reaction.** This form of schizophrenia ordinarily develops in individuals between the ages of 25 and 40. There is the typical history of failure in socialization and progressive emotional indifference to real-life events. The eventual symptom picture is dominated by absurd, illogical, and changeable delusions. Persecutory delusions are the most frequent type and may involve a wide range of ideas involving all sorts of plots. The patient becomes highly suspicious of his relatives and associates and may complain of being watched, followed, poisoned, talked about, or influenced by electrical devices rigged up by his enemies.

All this attention which he is receiving may lead him to the belief that he must possess remarkable qualities or be some great person. For why else would his enemies persecute him? Consequently, he may develop delusions of grandeur in which he may believe that he is the world's greatest economist or philosopher, or that he is Napoleon, Caesar, Lincoln, or even Jesus Christ.

These delusions are frequently accompanied by vivid auditory, visual, and other hallucinations. The patient may hear singing, or God speaking, or the voices of his enemies, or he may see angels or feel electric rays piercing his body at various points.

The patient's behavior becomes centered around these delusions and hallucinations, resulting in a loss of critical judgment and erratic, unpredictable, and even dangerous actions. In response to a command from a "voice" he may break up furniture or commit other violent acts. Similarly, he may attack someone who he is sure is persecuting him. As the condition progresses, there may be considerable disintegration of the emotional and intellectual capacities with utterly fantastic delusions. The illogical, delusional picture in paranoid schizophrenia is brought out in the following conversation.

Dr. What's your name?

Pt. Who are you?

Dr. I'm a doctor. Who are you?

Pt. I can't tell you who I am.

Dr. Why can't you tell me?

Pt. You wouldn't believe me.

Dr. What are you doing here?

Pt. Well, I've been sent here to thwart the Russians. I'm the only one in the world who knows how to deal with them. They got their spies all around here though to get me, but I'm smarter than any of them.

Dr. What are you going to do to thwart the Russians?

Pt. I'm organizing.

Dr. Whom are you going to organize?

Pt. Everybody. I'm the only man in the world who can do that, but they're trying to get me. But I'm going to use my atomic bomb media to blow them up.

Dr. You must be a terribly important person then.

Pt. Well, of course.

Dr. What do you call yourself?

Pt. You used to know me as Franklin D. Roosevelt.

Dr. Isn't he dead?

Pt. Sure he's dead, but I'm alive.

Dr. But you're Franklin D. Roosevelt?

Pt. His spirit. He, God, and I figured this out. And now I'm going to make a race of healthy people. My agents are lining them up. Say, who are you?

Dr. I'm a doctor here.

Pt. You don't look like a doctor. You look like a Russian to me.

Dr. How can you tell a Russian from one of your agents?

Pt. I read eyes. I get all my signs from eyes. I look into your eyes and get all my signs from them.

Dr. Do you sometimes hear voices telling you someone is a Russian?

Pt. No, I just look into eyes. I got a mirror here to look into my own eyes. I know everything that's going on. I can tell by the color, by the way it's shaped.

Dr. Did you have any trouble with people before you came here?

Schizophrenic Writings

The personality decompensation in psychotic reactions—both organic and functional—is frequently manifested in the content and form of patients' letters and other spontaneous writings. These examples reveal clearly the "loosening" and deviation of thought and the distortion of affect so common in the actions of schizophrenics In addition, they demonstrate different degrees of loss of contact with reality

The handwritten example (left) is from a letter by an 18-year-old girl diagnosed as a paranoid schizophrenic Only the first and last parts of the letter are reproduced here As will be apparent, the letter contained two quite different types of handwriting, indicating further the personality disintegration and emotional conflict the patient had undergone

This is one of several samples of psychotic handwriting studied by Lewinson[61] in an attempt to determine outstanding characteristics or disturbances in the writing of different types of psychotics She found that abnormal rhythmic disturbances were typical, with rigidity or extreme irregularity in height, breadth, or depth, and that there were consistent differences in this regard between schizophrenic, paranoid, and manic-depressive patients

On the opposite page are excerpts (above) from the fourth and fifth pages of an article entitled "Joe Stalin's Superiority Complex," written by a catatonic schizophrenic, below is a postcard written by a paranoid schizophrenic

(Excerpts at left, courtesy of T S Lewinson and The American Journal of Psychiatry)

Ye though I Walk through the Valley of the shadow of death I Will fear No evil for the Lord is With Me. His Machine and his gun they comfort Me.

What Master of arts under the canopy of heaven has got broad enough shoulders to let the chips remain Where they fall?

Hitch your Wagon to a star.

Then if she answers No then on My Way I will go to be at I a lonely troopdoor.

P. S.

Joe Stalins Nieper has carried Hitlers account through to the black Sea, Until and after all hell freezes over.

Two by four attorneys May Need to keep a case going over Joe E. Brown for the front, advertisement they receive.

Small deals stand in the Way of large projects.

A Mans pocket book has More Weight than himself.

Attorneys Would like to advance a settlement from the returns of a crap game With their daughter for an inherited romance.

* * * * * * * * * * * * * * * * * * * *

To: The football department and its members present and future
The University of New Mexico, Albuquerque, N. M.

I depend on correct, honest supplementation of this card by telepathy as a thing which will make clear the meaning of this card. There exists a Playing of The Great Things, the correct, the constructive, world or universe politics, out-in-the-open telepathy, etc. According to the Great Things this playing is the most feasible thing of all; but it is held from newspaper advertising and correct, honest public world recognition, its next step, by telepathic forces (it seems), physical dangers, and lack of money. Over 10,000 cards and letters on this subject have been sent to prominent groups and persons all over the world. Correct, honest contact with the honest, out-in-the-open part of them and of young persons is desirable. Important: A public literature on this playing. Copying the known, out-in-the-open world. This line of thought, talk, etc. rule. The plain and frank. Strangers. The Great Things and opposites idea. References: In the telepathic world the correct playings. Please save this card for a history record since it is rare and important for history.

Pt Well, only the Russians They were trying to surround me in my neighborhood One day they tried to drop a bomb on me from the fire escape

Dr How could you tell it was a bomb?

Pt I just knew.

6. Schizophrenic reaction, unclassified. As we have noted, this sub-grouping includes those cases of acute or chronic schizophrenic reactions which cannot be conveniently classified under the other major subheadings Two types of cases predominate here (1) chronic schizophrenics who exhibit a symptomatology including some combination of symptoms from the other sub-groupings, and (2) patients with acute reactions who exhibit an apparent hodgepodge of symptoms such as confusion of thinking, perplexity, turmoil of emotion, fear and dream states, and dissociative phenomena.

Summary of schizophrenic types Before going on to discuss the dynamic factors in schizophrenic reactions, it may be of value to summarize briefly the typical outstanding symptoms found in the six different schizophrenic reaction types

Latent schizophrenic reaction

Queer, eccentric individuals who show evidence of schizophrenic ideation and behavior (mannerisms, unpredictable acts, etc.) but who manage to make a borderline adjustment despite their psychotic symptoms.

Simple schizophrenic reaction

Reduction of external attachments and interests, impoverishment of human relationships, emotional blunting and apathy, some evidence of disintegration of thought processes with nonconspicuous delusions and hallucinations in hospitalized cases

Hebephrenic schizophrenic reaction

Shallow, inappropriate affective responses, giggling, silly, bizarre behavior and mannerisms, vague, fragmented, disorganized thinking, delusions of reference, persecution, influence, hypochondriasis, auditory and visual hallucinations.

Catatonic schizophrenic reaction

Conspicuous motor behavior exhibiting either marked generalized inhibition resulting in stupor, mutism, negativism, and posturing, or excessive motor activity and excitement, disordered thinking—especially blocking, delusions and hallucinations Patient may regress to state of vegetation

Paranoid schizophrenic reaction

Disorganization of thinking, with mental content composed chiefly of delusions of persecution, occasionally of grandeur, hallucinations, a fairly constant attitude of hostility and aggression; apprehensiveness and suspiciousness

Schizophrenic reaction, unclassified

Acute or chronic reactions with varied symptomatology not fitting above groupings

GENERAL DYNAMICS

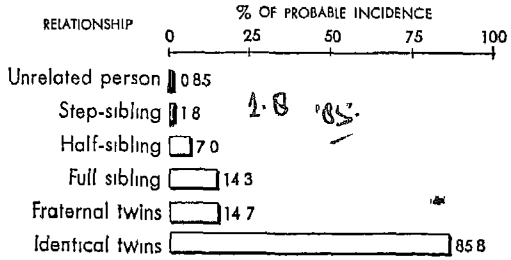
Despite a tremendous amount of research the dynamics underlying the development of schizophrenic reactions are still not completely clear In fact, there is some question as to whether we are not dealing with such a diversity of reaction patterns that any general dynamic formulation would be of limited value in a particular case of schizophrenia. However, a brief consideration of the contemporary status of the problem will aid us in understanding these reactions

Biological factors. Responsibility for schizophrenic development has been attributed at one time or another to numerous biological factors, among them heredity, endocrine and other physiological dysfunctioning, constitution, and cerebral birth trauma

1. *Heredity.* It is hardly surprising that so many early and contemporary investigators should have emphasized the importance of heredity in schizophrenia, in view of the disproportionate incidence of schizophrenia and other mental disorders in the family background of schizophrenic patients Kraepelin found an incidence of 53 8 per cent of mental disorders in the families of 1054 schizophrenic patients (Lewis[60]), and later studies have reported similar findings (Barahal[8]).

Kallmann[44] has summarized the statistical evidence for a genetic theory of schizophrenia by pointing out that an individual's average expectancy of becoming schizophrenic varies directly with the closeness of his blood relationship to a schizophrenic patient. The children of one schizophrenic parent have a probability of developing this disorder which is 19 times that of the general population, and the grandchildren, nephews, and nieces are about 5 times more likely to show an outcropping of schizophrenia than the average person. When both parents are schizophrenic the average expectancy rate for their children is 80 times normal. Kallmann, who has long championed the cause of heredity in psychopathology, concludes that "this distribution of schizophrenic rates indicates clearly that the chance of developing a schizophrenic psychosis increases in direct proportion to the degree of blood relationship to a schizophrenic index case*—a conclusive proof of the operation of heredity." (p. 551) His findings are summarized in the following chart.

PROBABLE INCIDENCE OF SCHIZOPHRENIA AMONG PERSONS WITH VARIOUS RELATIONSHIPS TO A SCHIZOPHRENIC PATIENT



Neither Kallmann nor most other contemporary investigators, however, assume that schizophrenia is inherited directly, but hold rather that it is transmitted by recessive genes in the form of "predisposition." The theory is that individuals with this predisposition will develop schizophrenia when placed under severe stress, whereas other persons will develop some other defensive pattern. If the individual is never placed under excessive stress, there is no reason to believe that a schizophrenic reaction will ever appear.

Many investigators are inclined to minimize the concept of a hereditary predisposition to schizophrenia. They point out that the life situation of an individual with a family background of schizophrenia or other serious mental disorder is usually characterized by considerable stress as well as undesirable parental example. Certainly we would expect a much higher incidence of mental illness among children reared in families with a schizophrenic parent.

However, the most telling blow to Kallmann's conclusions concerning the role of heredity in schizophrenia has come from Pastore's[82] critical evaluation of Kallmann's experimental methods and procedures. Pastore found so many weaknesses here that he concluded that "the genetics of schizophrenia is still an open question." (p. 302) As Pastore further points out, this conclusion is not intended to minimize the importance of hereditary factors in the etiology of schizophrenia, but merely to emphasize that their specific role is at present unknown.

2. *Constitution.* Since Kretschmer's[58] contention that schizophrenics tend to be of asthenic (slender) physique, considerable effort has been directed toward the importance of constitutional factors in the etiological pattern. The results of later investigators, such as Sheldon[92], have tended to confirm Kretschmer's findings, indicating that about two thirds of all schizophrenic patients do have an asthenic build. Among the remainder all types of body builds are found.

The relation of physique to schizophrenia, however, is difficult to evaluate. For one thing, schizophrenia occurs among a younger age group than is characteristic of other psychotic disorders—a group generally more slender than older age groups. Second, schizophrenics often reveal a long history of gradual, increasing withdrawal and intro-

* A known case of schizophrenia in a family is called an "index case" in family studies of this type.

version, a type of background that would not be conducive to muscular development. Of course, it is possible that their slender builds led to a withdrawal from the rough and tumble contacts of childhood and to the development of introversive tendencies. In any event we are dealing with an interaction of factors whose specific importance is not clear, but it seems doubtful that physique in and of itself is of great etiological importance.

The study of Escalona[27] on psychotic children, which we mentioned in our introductory discussion of the psychoses, provides the most convincing evidence for the importance of constitutional factors in the development of psychotic reactions, but as we noted, the specific constitutional factors and their exact roles remain as yet to be delineated. In addition, of course, her findings on such seriously deviant psychotic children may not apply to schizophrenics or other psychotics in general.

3. *Organic pathology*. Many investigators following the early leads of Kraepelin[50] and Bleuler[7] have attempted to establish an organic basis for schizophrenia. Despite a tremendous amount of research in neuropathology, endocrine pathology, and general bodily biochemistry, however, all attempts in this direction have so far been unsuccessful. Nevertheless, these researches have been of value in demonstrating positive correlations between schizophrenic disorders and numerous physiological conditions. For example, Elliot[26] found a greater number of symptoms of autonomic imbalance in a group of 100 schizophrenic women than in a control group of 100 nonpsychotic women, leading to the conclusion that the soma does not function so efficiently in schizophrenic women as in normals. Numerous investigators have pointed out that in many cases of schizophrenia the heart is small and the vascular apparatus inadequate, and there is a deficient functioning of the thyroid glands. This has led some to believe that schizophrenia is related to lower energy levels, involving a deficit in metabolic functioning which decreases the functional potential of the cortex and other bodily systems (Hecker[38]). Campbell[17] specifically suggests that this lowered level of physiological functioning is evidence of a constitutional defect of vitality of the organism which predisposes it to schizophrenic reactions when placed under excessive stress.

However, we find ourselves faced again with the problem of the degree to which this correlated organic pathology is a cause of mental illness and how much it is a result or accompaniment of the individual's general adjustive approach to his problems. For example, a psychological withdrawal and preoccupation with a fantasy world might be accompanied physiologically by a general diminution and underactivity in bodily metabolism, in reactions to stimuli, and in other bodily functions. The patient reacts psychobiologically to any stress and we should not be surprised to find both psychological and biological withdrawal. This would probably tend, in turn, to a vicious interactional circle: the lowered bodily energy and vitality would further encourage effortless fantasy rather than more vigorous attempts to make a more successful adjustment.

More recently, attention has turned to the role of the pituitary gland, which secretes a hormone called corticotrophin when the organism is under extreme stress—whether it is some outside poison, great physical exertion, or emotional stress. This in turn causes the adrenal glands to increase their flow of corticoid hormones. When the stress is of short duration these hormones help the body to meet the emergency. But when the stresses are prolonged and severe, a vicious circle presumably develops in which the emotional changes lead to actual tissue injury—the inner walls of the blood vessels become injured, an excessive load is placed upon the kidneys, and minute hemorrhages may occur within the heart or brain. More important, the adrenal glands apparently break down under the strain and fail to put out the hormones which

are so essential to the organism in meeting stressful situations (Maisel[64]). Although of great theoretical interest, there is not yet adequate clinical evidence for this point of view to justify its immediate application to the understanding and treatment of schizophrenia.

Winkelman and Book[107] made an intensive clinical and post-mortem study of 10 schizophrenics with special emphasis upon possible brain pathology. Although the gross appearance of the brain was not at all distinctive, microscopic findings did indicate focal and general loss of nerve cells and other pathological brain changes Their findings, together with other related studies in the field, led the authors to suggest that schizophrenia should be included among the "organic" psychoses It may be noted, however, that the patients may have been schizophrenic for many years before the autopsy and in addition to inadequate dietary and other habits, may have undergone various illnesses and even senile brain changes before death Again the sequence of cause and effect is difficult to evaluate. Also, the findings of other competent clinicians have revealed no such obvious brain pathology in schizophrenia—either in terms of electroencephalographic or of anatomical criteria

Other lines of organic evidence are worthy of mention. Katz[53] has concluded from his investigations that injury to the brain during and after birth has been an important factor in certain cases of schizophrenia, although he concludes that ordinarily a number of causative factors are at work, including emotional conflicts Finally, Herman and his colleagues[40] report 12 cases of catatonia in patients with syphilis of the nervous system, epilepsy, head trauma, and toxic psychoses They therefore conclude that catatonic reactions can be grouped into three categories those in which cortical damage predominates, those with marked hypothalamic involvement, and those in which psychological factors predominate

Such evidence tends to support the conclusion that schizophrenia is not a disease entity but a syndrome or a reaction type in which either psychogenic or organic factors may predominate (Bellak[5]). Or, stated differently, individuals of a certain constitutional and psychological make-up may react to excessive stress with a schizophrenic adjustive reaction whether the stress is organic or psychological or both

Psychological factors. Despite their fundamental organic bias, both Kraepelin and Bleuler believed in the importance of certain psychological processes in the development of schizophrenia (Katzenelbogen[54]). Bleuler in particular emphasized the role of frustration and conflict, concluding that there was a splitting of personality, determined by complexes Other psychological factors, too, will claim our attention

1. *Frustration and conflict* Since the time of Bleuler there has been increasing agreement among psychiatrists and psychologists that schizophrenia is primarily the result of faulty responses to frustration and conflict In the face of stress which the individual feels inadequate to cope with, he resorts to the extreme use of rationalization, projection, emotional insulation, fantasy, and other ego defensive measures Below is a summary of Adolf Meyer's conclusions concerning the development of this pattern (Christian[19], Meyer[70, 71, 72, 73])

In the process of personality development, the individual learns various methods of coping with his problems Some of these methods involve dealing directly with life's problems and making the most effective adjustment to them that is possible However, other adjustive reactions are in the nature of evasive substitutions—utilizing rationalization, projection, fantasy satisfactions, and emotional withdrawal and insulation These evasive reactions inevitably lead to failure and self-devaluation which in turn makes their use even more necessary Thus vicious habits of response become established which lead to a complete miscarriage of ego defenses—instead of

helping the individual to adjust successfully, they actually make such an adjustment impossible

The individual who later develops schizophrenia usually manifests an early withdrawal from a world he interprets as frustrating and hostile This withdrawal is often concealed behind what seems to be an exemplary childhood, but which on closer examination reveals adherence to meekness and formally good behavior in order to avoid frights and struggles Instead of participating in an active and healthy way in the activities of childhood, the individual withdraws behind a façade of goodness and meekness This withdrawal, of course, inevitably leads to failures and disappointments which in turn serve to encourage further withdrawal from the world of reality and foster the use of fantasy satisfactions to compensate for real life failures

As this "good" child enters the adolescent period, he tends to be overly serious, painfully self-conscious, inhibited, and prone to prefer his own company Often he is unduly preoccupied with various religious and philosophical issues Normal interest in the opposite sex is lacking, and vivid ideas of the evilness of sexual behavior are usually only too apparent As the adolescent enters the period of adulthood, with its demands for independency, responsibility, and family relationships, the youth's lack of adequate socialization and preparation for meeting these problems proves fatal Instead of increased effort and a vigorous attack on the problems associated with the assumption of adult status, the youth finds the world unbearably hurtful and turns progressively inward to fantasy satisfactions.

It is out of this type of background that schizophrenic reactions develop. These reactions may be precipitated by the increased stress placed on the individual during the period of puberty and young adulthood, or by stresses occurring later in life However, it is particularly in coping with the ordinary adolescent and young adult conflicts centering around dependency-independency problems and the handling of hostility and sexual drives that the insecure, withdrawn personality seems to get into serious difficulty It is usually difficult for such an individual to enter into vigorous social competition for jobs and adult status Rather he tends to find the competitive aspects of adult life terrifying and disillusioning; it seems much safer to maintain his childhood position of dependency upon the family His whole problem is often complicated too by unrealistic levels of aspiration and altruistic ethical ideals to which he expects others to conform Such a psychologically vulnerable individual is of course easily hurt by the inevitable setbacks and frustrations of adult life

In the sexual sphere, his problems are usually complicated by his highly moralistic attitude toward sex and his failure to develop to a normal heterosexual level of adjustment In general, his sexual behavior is relatively immature and undifferentiated Usually he has had few if any sexual contacts with the other sex (it is not unusual to find schizophrenics over 30 years of age who have never even had a date) Even if he has been married and so has had what appear to be more adequate sexual patterns, these are usually found on closer examination to have been hopelessly unsatisfactory and conducive to feelings of repugnance and guilt As a result of his sexual immaturity, his sexual fantasies, like those of the early adolescent, may include a wide range of sexual objects, including members of the same sex Since even heterosexual fantasies are considered immoral and unacceptable, it is not surprising that homosexual fantasies often lead to severe personality conflicts, to self-devaluation, and in some instances, as in paranoid schizophrenia, to the use of projection and other defense mechanisms for protecting the "self" against these immoral inner desires.

We shall see in Chapter 9 that homosexual fantasies, as well as overt homosexual behavior, involve far more males than is ordinarily realized, and need not lead to schizophrenia. They have a part in schizophrenia

only in cases where the individual is predisposed to evaluate them as horribly immoral and repugnant, and it is the resulting conflict and self-devaluation, rather than the homosexual fantasies or behavior, which leads to mental illness

In a similar way, the handling of hostility is a particularly stressful problem for such an individual, because he usually considers it completely immoral and terribly dangerous The hostility generated by his feelings of hurt and frustration is often more than he can bear, yet as a consequence of his withdrawal from normal social participation, he typically lacks any adequate comprehension of the role of hostility in normal everyday social relations He does not know how to express it in socially acceptable ways and he is completely upset when he is the object of other people's hostility Consequently he usually tries to repress his hostility and to deny even to himself that he is the kind of person who has such unacceptable impulses The author is reminded here of a schizophrenic patient whose adjustment difficulties centered in part around his complete inability to express hostility After several group therapy sessions, this patient proudly related to the group how for the first time in his life he had actually told a fellow who shoved in front of him in the cafeteria line to wait his turn.

As in the case of the neurotic, the schizophrenic's conflicts get him into a vicious circle H[illegible]

c[illegible] does not necessarily reduce his need or desire for social approval, status, and love However, it does materially reduce his chances of gratifying these desires by removing him from the normal stream of social development and preventing him from acquiring the necessary attitudes and skills requisite to the attainment of his desires Thus it can readily be seen that individuals who are severely sensitized to the hurts and frustrations of social relations and who are handicapped by their subsequent withdrawal from the educative effects of normal social give and take, find the stresses of young adulthood too much to handle

2. *Early psychic trauma.* This general developmental picture of schizophrenia as a failure in socialization, and the gradual accumulation of faulty attitudes and habits of response, is supplemented by the increasing clinical evidence of early psychic trauma in schizophrenia As Menninger[67] points out, "There is much proof that the injuries suffered by those individuals who later become schizophrenic occur very early in infancy." (p 101) These injuries may take many forms, such as neglect and rejection by the mother, death of a parent, or other severe frustrations or disappointments Many of these wounds take place in what seem to be exceptionally good homes, and often the parents are quite unaware of any trauma to the child In a study of the parent-child relations in childhood schizophrenia, Kanner[45] found that many of the parents were prominent and respected citizens in the community, but that toward their children they were undemonstrative and showed a mechanization of human relationships with an almost complete lack of any real warmth and affection According to Kanner, the resulting apathy, seclusiveness, and irritability of the children seemed to be an act of turning away to seek protection and comfort in solitude These early wounds will be reinforced by any subsequent events which lead to feelings of inferiority and self-devaluation or to the perception of the world as a hostile and dangerous place

Menninger[68] describes it this way:

"Children injured in this way are apt to develop certain defenses They cover up, as the slang expression puts it They deny the injury which they have experienced or the pain which they are suffering They erect a façade or front, 'All's well with me,' they seem to say 'I am one of the fellows, I am just like everybody else I am a normal person' And indeed they act like normal persons, as much as they can They go

to the same schools, they complete the same work, they seek the same goals, they do the same things that all the rest of us do Often they are noticeable only for a certain reticence, shyness, perhaps slight eccentricity. Just as often, they are not conspicuous at all . .

"What is underneath that front? One might say that the same sort of thing goes on in the emotional life that goes on when an abscess slowly develops beneath the surface of the body, for example in the lungs or in the liver There has been an injury, an infection Counteracting processes have been set up so that tenseness and pressure and potential pain are gathering. But all of this is concealed from the outsider There is intense conflict and tension and anxiety and strong feelings of bitterness, resentment and hate toward those very people with whom the external relationships may be so perfectly normal 'I hate them! They don't treat me right. They will never love me and I will never love them I hate them and I could kill them all! But I must not let them know all this. I must cover it up, because they might read my thoughts and then they wouldn't like me and wouldn't be nice to me.'

"All this is covered up as long as possible—by trivial conversation, pleasant greetings, chat about the movies or the picnic and the next date, and the rest of the ordinary things of adolescent or early adult life For the chief problem in the person who is going to develop what we call schizophrenia is, 'How can I control the bitterness and hatred I feel because of the unendurable sorrow and disappointment that life has brought to me?' His efforts to control it often show themselves in various kinds of withdrawal, lone-wolfishness, seclusiveness, even mild suspiciousness, or just a quiet going of one's own way with disinterest in active social participation.

" And as in the case of coronary sclerosis and diabetes, the regimen under which they live has much to do with their successful adaptation Given certain new stresses, the façade may break down and the underlying bitterness and conflict may break through The patient may suddenly begin to hear voices talking about him, saying that he is mean, that he is hateful Or he may begin to detect the hostility of other people in a far larger measure than could possibly be true He may begin to consider himself persecuted

"Or the break-through may be like this A little girl who was one of the most popular members of her community, president of her high school class and prominent in her Sunday school, calmly walked into her father's bedroom one night and shot him with a revolver The following day she was the same 'sweet, pleasant, demure but somewhat shy girl' that she had always been No one could believe, at first, that she had really committed the murder Nor could anyone believe, either, among those who knew and loved her, that she had schizophrenia But the psychological test showed it very clearly.

"The most important cases of overt schizophrenia are not those in which the break-through appears in such aggressive and violent direct action as I have described In fact, most cases of schizophrenia are not dangerous The commonest type of 'break-through' is that in which the conflict appears in the form of physical symptoms. These physical symptoms usually appear as chronic pains in the abdomen or in the back or in the head." (pp 101-104)

The descriptions of both Meyer and Menninger afford an excellent clinical picture of the development of schizophrenic reactions. The individual's gradual withdrawal into his own self-limited, self-ruled, and self-defined world can be understood as a repudiation of a world of reality which is interpreted as unbearably hurtful and dangerous And it would be impossible for an individual to repudiate reality in favor of his own self-created world without considerable emotional blunting and distortion relative to events in the world of reality His loss of interest and emotional insulation then serve as an added protection from further hurt and from the necessity of further striving

3. *Lack of reality checks* Many schizophrenics are handicapped in their social development by oversolicitous and overprotec-



After E Guttman and L W S Maclay, "Clinical Observations on Schizophrenic Drawings," British Journal of Medical Psychology, XIV(1937)

Development of style from the normal to the schizophrenic stage as illustrated by the work of an art student who became psychotic Note the blurring of form and content, fire and smoke, the "castle of bad wishes," the form of the cross The large face and peering eyes are characteristic of drawings of paranoid or paranoid schizophrenic patients

tive mothers (Duval and Hoffman[25]; Wittman and Huffman[108]). This, together with their early social withdrawal, has a variety of effects which are of developmental significance. Perhaps most important, these factors tend to cut him off from the normal activities of social reality testing—from social give and take—so that he tends to be passive and protected and fails to develop the necessary skills and emotional attitudes for healthy social participation. For example, in the matter of role playing, the schizophrenic is handicapped by a lack of social experience We all model our behavior after that of others and attempt many roles which we test out in the group and either adopt as successful or discard Since this eliminative process does not take place in the schizophrenic's social development, he may have very unrealistic ideas of the types of social roles that are open to him, and it may be easy to fantasy himself as a great religious savior or some other remarkable or unusual person.

Our self-evaluation is to a large extent determined by the way other people react to us. We gradually learn to see ourselves somewhat as others see us and to evaluate ourselves accordingly However, the schizophrenic is handicapped by a lack of ability to see himself from the perspective of others; consequently his attitudes toward himself are apt to be fantasy ridden and distorted. The same point holds, of course, for his environmental attitudes, which suffer from the rigidity and lack of perspective of his own limited viewpoint, uncorrected by social experience

Thus it is the lack of reality checks, rather than the fantasy preoccupation in itself, which is so devastating to personality development. As the schizophrenic's language and thought processes are not subject to normal reality checks, they become progressively more individualistic. Such a lack of constant reality checks in the development of environmental and self-evaluations would in itself make for an ever-widening breach between the schizophrenic and other people.

4. *Regression* Considerable interest has been shown in the dynamics underlying the disorganization or disintegration of thought processes in schizophrenia. Kasanin[52], Goldstein[32], and others (Levy[59]) have advanced the belief that in schizophrenia there is a reduction from conceptual thinking to a more primitive "concrete" thinking in which the individual is dominated by the external and internal stimuli acting upon him at the moment and reacts to parts of the perceptual field as if they were wholes As a result of this "concrete" approach, the patient loses the normal demarcations between himself and the world, his words lose their usual representative character, and his perceptions no longer show the expected relation of parts to a whole Kasanin attributes this concretization or fragmentation of thought processes to extreme regression to immature and childish levels of thinking

Here Kasanin points out that the child lives in a world which is partly real and partly magic, and that he forms all sorts of fantastic notions and ideas about the things around him He tends to personify and vitalize inanimate objects and to endow them with various powers He may also tend to feel that he is the center of the universe and to develop ideas of his own omnipotence Also commonly found, according to Kasanin, is the belief that adults can read his thoughts.

Kasanin then attempts to relate many of the odd and bizarre delusions of schizophrenics to the magical thinking and other characteristics of children's thinking For example, he points out that most schizophrenics at one time or another express ideas of omnipotence. This may be expressed by the patient who sits quietly in his chair with his index finger flexed in a certain way, afraid to change its position because the world would suddenly be destroyed if he moved. Similarly, many schizophrenics are convinced that other people can read their minds and know their thoughts Everyone knows what they are thinking about, and when questioned

by the psychiatrist, they may look at him in amusement and consider the whole thing a farce since he obviously knows their thoughts already without being told

According to Kasanin, the schizophrenic's deterioration in personal and ethical habits is also part of this general picture of regression. In extreme form this regression presumably is manifested by the catatonic patient who assumes a fetal position, apparently symbolizing his desire to return to a helpless, irresponsible, dependent level In this connection Arieti[2] has pointed out that in advanced cases, patients frequently collect apparently useless objects with which they later decorate themselves Arieti considers both habits to be evidences of regression to more primitive levels of response.

In a similar vein, the parallels between schizophrenic thinking and the thinking of primitive peoples have been emphasized by Boisen.[9, 11] In primitive religions and even in those which are not so primitive, there are ideas of rebirth and previous reincarnation, divine intervention, and salvation through sacrifice. Commonly found also are ideas of taboo and magic, and the tendency to believe in mysterious supernatural forces and in possession by good and evil spirits

Regression has been accepted by a number of psychoanalysts as the basic mechanism underlying schizophrenic reactions. A general picture of this viewpoint can be obtained from Brown[15].

"Schizophrenia represents a deep libidinal and ego regression. The hallucinated voices and figures represent projection of the previously introjected parental images His schizophrenic gesturings and postures represent normally unconscious ideas to which his weakened ego allows expression. His delusions can almost always be shown to come from unconscious wishes which are not controlled by the reality principle The schizophrenic splitting represents the return to the early level where effect and cognition were not yet differentiated." (p. 324)

There is some contradiction, however, both in findings and in interpretation. Despert[22], Cameron[16], and other investigators (Boas[8]; Yerbury and Newell[109]) find no such close resemblance between schizophrenic thinking and characteristics inherent in the thinking of either children or primitives Cameron, in a study of deteriorated schizophrenic and senile patients, concluded from his studies that schizophrenic thinking was characterized by overinclusion and an inability to organize and subordinate the events occurring simultaneously in the environment rather than by a regression to childish modes of thought Boas[8] too states "The comparison of forms of psychoses and primitive life seems still more unfortunate The manifestation of mental disturbances must necessarily depend upon the culture in which people live and it must be of great value to the psychiatrist to study the expression of forms of psychoses in different cultures, but an attempt to parallel forms of healthy primitive life and those of disturbances in our civilization is not based on any tangible analogy" (p 176) Although there are certain common elements in and obvious resemblances between the thinking and fantasy of children, primitives, and schizophrenics, it would appear in the light of Cameron's and Boas' findings that basically these thought processes are not the same. The child can distinguish adequately between his fantasies and the world of reality; likewise the primitive, however much in error his concepts may be, is not out of contact with his social and physical environment

Thought disturbances quite similar to those in schizophrenia are found also in most other psychotic reactions, and are considered by many investigators to be more in the nature of ego disintegration or disorganization than of regression to more primitive levels As a result of this ego decompensation, the patient seems no longer able to maintain the habitual responses which marked his training in thinking and behavior This involves a lowering of reality and ethical controls which has been

likened to the thought processes in dreams. There would appear to be many resemblances between schizophrenic ideation and dreams in terms of bizarre content, the splitting of affect and thought, and the gratification of fantasy wishes. It does not appear contradictory to assume that regression also plays an important role in this entire process.

Related to the problem of schizophrenic decompensation is the question of whether or not a permanent irreversible loss or deterioration takes place in so-called "deteriorated" schizophrenics. In general this question has been answered in the negative. Kant[48] examined under sodium amytal 100 unselected male schizophrenics with an illness duration of at least ten years, with the object of determining the degree of deterioration. He found that although apparent extreme disorganization was always present in cases presenting pronounced withdrawal symptoms, even the very disorganized patients could generalize and conceptualize rather freely when adequate rapport and cooperation had been established.

5. *Ego defensive values of symptoms.* As we have noted, the emotional blunting and distortion in schizophrenic reactions protect the individual from the hurt of disappointment and frustration. Regression enables him to lower his level of aspiration and to accept a position of dependency Projection helps him to maintain some semblance of ego integrity by placing the blame for his difficulties on others and attributing his own unacceptable desires to them Wish-fulfilling fantasy enables him to achieve some measure of compensation for his feelings of inferiority and self-devaluation In various combinations and degrees, these mechanisms seem to constitute the basic defensive framework of schizophrenic reactions.

In the exaggerated use of fantasy and projection, we find the two mechanisms which are most apt to lead to the development of delusions and hallucinations with their many ego defensive values Delusions of influence enable the patient to blame others for causing his own inadmissible thoughts and behavior. Fantasies of being the focus of widespread interest and attention help the patient to compensate for feelings of isolation and lack of social recognition and status Delusions of persecution explain away the patient's failure to achieve a satisfactory adjustment in the real world by placing the blame on his enemies Delusions of grandeur and omnipotence may grow out of simple wishful thinking and may help to counteract feelings of inferiority and inadequacy by a sense of great personal worth and power

Hallucinations in functional psychoses are interrelated with delusions and have similar dynamic functions They are closely related to wishful thinking, the projection of unacceptable desires and impulses, feelings of unbearable guilt, and so on Schizophrenic patients may speak to God and hear him confer great powers upon them and assign them the mission of saving the world Or the patient with guilt feelings over homosexual thoughts may hear voices which accuse him of being a homosexual or of being guilty of other sexual misdeeds Occasionally patients hallucinate sexual relations

Of course, it may be noted that acutely disturbed patients may be so upset by their emotional conflicts that almost a delirious ideation occurs, here the delusions and hallucinations are part of a picture of acute mental turmoil in which their ego defensive value is greatly reduced or comes to be nonexistent.

Finally, the stereotypies and other symbolic behavior of the schizophrenic can also be understood in terms of the patient's mental processes and general reactive pattern. Thus the patient who thinks he is Christ may prostrate himself on the floor with his arms spread at right angles to form a cross, or dangerous obsessive desires may be counteracted by various magical rituals. Often the symbolism is by no means easy to fathom, but the study of it may be of value in fur-

thering an understanding of apparently meaningless behavioral symptoms. (See page 249)

DYNAMIC DIFFERENCES BETWEEN THE SIX TYPES

How do the dynamics in simple or paranoid reactions differ from those in hebephrenic or catatonic reactions? The work of Boisen[10], a psychiatrically trained chaplain who himself suffered from an acute episode of catatonic schizophrenia, has been of great value here

In terms of general personality organization, Boisen points out that the schizophrenic is characteristically a "good" boy. This means that he has accepted for himself the role his parents and teachers have chosen for him—that is, he has internalized the ethical and moral values of society and has judged himself in accordance with these standards This moral and ethical personality dimension or *superego* Boisen refers to as the "generalized other" In this the schizophrenic differs sharply from the delinquent, who usually has not accepted the authority or standards of his parents and teachers, and also from the mature adult who has evaluated these standards and modified them in his own behavior rather than accepting them blindly

The schizophrenic, having accepted his social role, now finds himself unable to achieve a sufficient degree of personality unification on the basis of this role He suffers from various unresolved internal conflicts centering around feelings of failure, unacceptable sexual and hostile desires, and so on This results in intense inner turmoil, self-condemnation, and anxiety, the net result being an anxiety-ridden and intolerable self-devaluation. There are several different ways in which he may attempt to cope with his mounting feelings of personal failure and conflict.

In latent schizophrenic reactions the individual is forced to only a mild use of the various schizophrenic defenses in order to handle his inner needs and to cope with reality He manages to maintain his general reality orientation and to stabilize his defenses on a marginal level of adjustment. If the stress were to increase, he would decompensate further

In simple schizophrenic reactions the individual withdraws from the struggle of life, becomes disinterested and emotionally apathetic, and gives up the fight to achieve social status and esteem. Although the price of this withdrawal in terms of self-devaluation may occasionally be reflected in episodes of mental turmoil or impulsive behavior, the emotional insulation is generally effective, with slow but gradual personality disintegration. Of course, in simple schizophrenic reactions this decompensatory process may be stabilized, so that the individual becomes an apathetic drifter or remains a dependent, noncontributing member of the family without decompensating further to the point where hospitalization would be required

In hebephrenic reactions, the emotional withdrawal and personality disintegration reach their ultimate in degree The individual gives up all claim to social approval and status and under the pressure of his conflicts seems to regress and disintegrate at the same time The word-hash, silliness, regression, and other evidences of severe personality deterioration are considered part of this general hebephrenic fragmentation or disintegration, growing out of the patient's discouragement, his loss of faith in himself, and his withdrawal from social contacts and reality.

In catatonic reactions, according to Boisen, the patient is engaged in a desperate struggle and is stirred to the bottommost depths of his mental life in his attempt to solve his difficulties and maintain his ego integrity Thus Boisen regards the catatonic excitement as a frenzied attempt to deal with the threats to the ego, and catatonic stupor as a retreat during which the individual strives desperately to find some philosophy of life, some system of beliefs, some faith in himself and the world on which to build Here malignant reactions have not become established as yet and the individual, though panic-stricken,







Electro-shock has been found effective in the treatment of many schizophrenic patients, particularly those manifesting an acute onset of symptoms The electro-shock serves to bring the patient back to "reality" and intensive psychotherapy can then maintain the reality contact and help the patient to achieve a more effective personality adjustment The patient shown in these pictures was severely hallucinated (above) prior to treatment After a series of electro-shock treatments (above, right) which continued over a period of three weeks, sufficient contact could be re-established with her to permit successful psychotherapy (right) and readjustment

is still fighting desperately to save himself and resist personality disintegration.

In the paranoid reaction, the patient tries to maintain feelings of personal worth and respect by misinterpreting the facts he simply projects the blame for his difficulties upon others Now it is all the other fellow's fault He likes them but they don't like him They are interfering with him and persecuting him As we have noted, it is only another step to explain all the attention others are paying him by means of delusions of grandeur in which he is indeed a remarkable person with great abilities We shall presently see that in so-called paranoia proper such delusional defenses hold up so well that the rest of the patient's personality remains relatively intact However, in paranoid schizophrenia the patient is so overwhelmed by both inner and outer demands that even with the aid of these psychotic defenses he undergoes severe personality disorganization.

Finally, in unclassified schizophrenic reactions we may be dealing with almost any possible combination of the dynamics of the other types, as well as with very acute

psychotic episodes which reach a high level of intensity and then subside rather rapidly much like the psychotic reactions we discussed in connection with combat exhaustion.

Thus of the six schizophrenic reaction types, only the catatonic and the acute unclassified reactions hold any material possibility of spontaneous ego reorganization and remission to a more healthy adjustment level The others involve more serious and chronic ego disorganization and require extensive, long-term psychotherapy

Sociological factors. The role of sociological factors in the development of schizophrenia is poorly understood. We have seen in our previous discussion that there is more schizophrenia in our culture than in certain primitive cultures, and that within our own culture there is a higher incidence in the poorer areas of our large cities Faris[29] concludes that the social disorganization in these poorer areas intensifies the personal problems of the individual and also provides a social environment in which no satisfactory conventional solutions are available Malzberg[65] suggests that the increased stress and strain and lesser security of the larger cities are responsible for the higher incidence in urban areas than in rural ones

Schizophrenia has also shown a relatively high incidence among certain sub-groups within our society For example, the rate is particularly high among nuns Apparently, however, it is not that the actual way of life produces disorders so much as that individuals with schizophrenic trends are often attracted to a life of meditation withdrawn from everyday hustle and strife (Jahrreiss[42])

THERAPY AND PROGNOSIS

The prognosis in schizophrenic reactions has been traditionally unfavorable. Under the routine hospital treatment prevalent before the introduction of modern shock and psychotherapeutic procedures, the rate of discharge approximated about 30 per cent But only a small percentage of these patients could be considered fully recovered, and even here the recovery was due not so much to the hospital treatment as to the patient's spontaneous recovery by restructuralization of his own ego defenses Hospital treatment did serve, however, to reduce the number of deaths due to infectious diseases such as tuberculosis and pneumonia, which at one time were of common occurrence among physically debilitated schizophrenics

With the introduction of new forms of therapy the general prognosis in most cases of schizophrenia has become much more favorable These newer therapies are still in experimental stages and the results vary considerably from one investigator to another Insulin therapy has proved to be the most effective medical therapy, showing recovery or marked improvement in some 40 to 60 per cent of all cases In a follow-up study Ross[90] and his colleagues found that 57 per cent of a large series of insulin-treated patients were still in the hospital at the end of two years, and 37 per cent were making a successful adjustment in the community At the end of five to ten years Rupp and Fletcher[91] found that 53 5 per cent of 641 schizophrenics were still in mental hospitals and 27.5 per cent in the community. (13 9 per cent were dead and for the remaining 5 1 per cent no adequate follow-up was available) The combination of insulin shock with electro-shock has often proved more effective than insulin alone, particularly with cases of long duration Taylor[98] reports that 438 out of 682 (64 per cent) schizophrenic patients so treated recovered sufficiently to be released from the hospital Even more encouraging results are reported by Veit[103], who found that 78 per cent of a series of 158 schizophrenic patients receiving insulin and/or combined shock treatment were able to leave the hospital.

But shock methods alone are inadequate in terms of long-range results, all indications being that most patients so treated tend to relapse over a period of time For the best long-range results, the combination of psy-

chotherapy with shock therapy is most effective. Shock therapy may hasten the recovery of a patient who might have been able to restructure his defenses and make a reasonably good recovery anyway. Its greatest value, however, probably lies in the fact that it does result in a temporary alleviation of symptoms, enabling the therapist to get through to the patient with psychotherapy designed to help him gain insight into his illness and achieve more adequate techniques of adjustment. Various therapeutic aids, such as recreational and occupational therapy, are also helpful in schizophrenia; they give the patient pleasant contact with reality and acceptable outlets for emotional drives.

Two other treatment procedures for schizophrenics deserve special mention, namely psychosurgery and group psychotherapy. Prefrontal lobotomies and other psychosurgical procedures have been used on chronic cases which have not responded to less drastic methods of treatment. Although there are many favorable reports on results, there is still need of further experimental evaluation before we shall be able to evaluate accurately the long-term results and range of effectiveness of psychosurgical procedures. Group psychotherapy has been increasingly used in the treatment of psychotic patients and seems to offer a therapeutic approach of great value, particularly in providing the schizophrenic patient with a safe social environment for reality testing, and for the development of understanding and skill in interpersonal relations. Although there is convincing evidence that group psychotherapy is the most effective medium for the socialization of withdrawn schizophrenic patients, this method of therapy too is still undergoing experimental evaluations designed to increase its effectiveness and range of application. The actual techniques and principles involved in all these methods of therapy will be more fully described and evaluated in a later chapter.

The prognosis is not the same for all cases of schizophrenia. The following conditions generally indicate a short duration of disorder: (1) early treatment—before eighteen months, (2) onset acute (as in the catatonic type) rather than gradual and insidious, (3) known precipitating conditions—environmental setbacks, such as severe financial losses and the death of loved ones*, (4) a catatonic reaction pattern or one showing evidence of manic-depressive symptoms, (5) insight—the greater the patient's insight into his illness, the more favorable the prognosis, and (6) a favorable and understanding environment to which the patient can be returned (Kant[10], Rennie[87]).

Although these conditions make cure more hopeful, there is no substitute for early detection and prevention in schizophrenia (Menninger and Rapaport[68]). In this respect it may be of value to note some of the early personality trends often found in the background of patients who later develop schizophrenic reactions (Bradley and Bowen[13], Dunham[24], Gottlieb[34], Sherman and Jost[94], Yerbury and Newell[100]). These include (1) seclusiveness—introverted preoccupation with their thoughts, (2) social withdrawal, together with a lack of good social attitudes—such children are often meek and formally good and do not enter into social activities with healthy enthusiasm, (3) rigid personality—this often involves narrow interests, (4) emotional ambivalence and apathy—such children may alternate between intense affection, hate, and apathy toward loved ones, (5) oversensitivity to criticism and environmental change, (6) self-consciousness and shyness, and (7) obsessive-compulsive or hypochondriacal patterns.

Although none of these trends necessarily insures the later development of schizophrenic reactions, they are all socially handicapping, and their early detection and correction are vital for healthy personality development.

The value of diagnostic tests in the early

* Kant[10] found that severe precipitating stresses in the life situation of the patient were five times as frequent in those schizophrenics who recovered as in those who deteriorated.

detection and prevention of schizophrenic reactions has been emphasized by Menninger and Rapaport[98], and many other investigators. By means of the Make A Picture Story Test, the Rorschach, the Thematic Apperception Test, and other diagnostic instruments to be described in Chapter 12, dangerous trends can be detected and steps taken to correct undesirable techniques of adjustment before they become well established.

PARANOID DISORDERS

The term *paranoia* has been in use a long time. The ancient Greeks and Romans used it to refer more or less indiscriminately to any mental disorder. Our present, more limited use of the term stems from the work of Kraepelin, who reserved it for cases showing systematized delusions without accompanying personality deterioration. Currently, as we have seen, two types of paranoid reactions are included under the general heading of paranoid disorders.

1 Paranoia, with an intricate, logical, systematized, and slowly developing delusional system centering primarily around delusions of persecution and/or grandeur. Aside from the delusions, the patient's personality remains relatively intact, with no evidence of serious personality disorganization.

2 Paranoid state, with transient paranoid delusions lacking the logical and systematic features of paranoia, but not manifesting the bizarre fragmentation and deterioration of a schizophrenic. Hallucinations are common here.

Paranoid disorders are relatively rare in hospitalized populations, constituting only some 1.5 per cent of all first admissions to mental hospitals. It used to be thought that more men were affected, but at present women outnumber the men in the ratio of about 1.7 to 1. The average age of first admission is about 48 years with most cases occurring between 35 and 55 years. The intellectual and economic level of the paranoid is superior to that of the average patient. Lyon[68] found that 10 per cent of institutionalized paranoid patients had attended college, as against 5 per cent for the general hospital population.

Hospital statistics are probably misleading because often paranoids have sufficient judgment and self-control to avoid hospitalization. Many suspicious, exploited inventors, persecuted businessmen, fanatical reformers, self-styled prophets, litigious nuisances, and crank-letter writers belong in this category but escape hospitalization unless their behavior creates a serious public disturbance or threat.

PARANOIA

Most of us on various occasions may wonder if we are not "jinxed," when it seems as if everything we do is wrong and that "the cards are stacked against us." If we are generally somewhat suspicious and disposed to blame others for our difficulties, we may feel that most people are selfish and ruthless and that an honest man, no matter what his abilities, does not have a fair chance. As a result, we may feel abused and become somewhat bitter and cynical. Many people go through life feeling underrated and frustrated, and brooding over fancied and real injustices.

In paranoid reactions the picture is similar but considerably exaggerated. The individual feels that he is being singled out and taken advantage of, mistreated, plotted against, stolen from, spied upon, ignored, or otherwise mistreated by his "enemies." The delusional system usually centers around one major theme, such as financial matters, a job, an invention, an unfaithful wife, or other life affairs.* A person who is failing on the job

*At one time it was customary to distinguish several types of paranoid reactions in accordance with the delusional ideas manifested—whether persecutory, grandiose, erotic, jealous, or litigious. But a classification in terms of delusional content has been found not to be very helpful because of the many directions in which delusions can develop.



This patient has established himself as "guard" and patiently sits hour after hour conscientiously performing his "duty"

may insist that his fellow workers and superiors have it in for him because they are jealous of his great ability and efficiency. As a result, he may quit his job and go to work elsewhere, only to find friction developing again and his new job in jeopardy Now he becomes convinced that the first company for whom he worked has written to his present employer and has turned everyone here against him, so that he hasn't been given a fair chance. With time, more and more of the environment is integrated into his delusional system and each additional experience is misconstrued and interpreted in the light of his delusional ideas.

Although the evidence which the paranoiac advances to justify his claims may be extremely tenuous and inconclusive, he is unwilling to accept any other possible explanation and is impervious to reason He may be convinced of his wife's unfaithfulness because on two separate occasions when he answered the phone the party at the other end hung up Argument and logic are futile In fact, any questioning of the patient's delusions usually only convinces him that his interrogator has sold out to his enemies.

Milner[70] cites the case of a paranoiac, aged 33, who murdered his wife by battering her head with a hammer Prior to the murder, this paranoiac became convinced that his wife was suffering from some strange disease and that she had purposely infected him because she wished him to die. He believed that this disease was due to a "cancer-consumption" germ He attributed his conclusion in part to his wife's alleged sexual perversion (she would not permit him to have normal intercourse with her although she relieved him by means of masturbation and fellatio, after doing so, she would get into bed with his sister and apparently participate in homosexual relations). He also gave the following reasons for his belief.

"1 His wife had insured him for a small sum immediately after marriage.

"2 A young man who had been friendly with his wife before their marriage died suddenly.

"3. A child who had lived in the same house as his wife's parents suffered from fits (He also believed that his wife's parents were suffering from the same disease)

"4 For several months before the crime his food had had a queer taste, and for a few weeks before the crime he had suffered from a pain in the chest and an unpleasant taste in the mouth " (p 130)

Although ideas of persecution predominate in paranoid reactions, many paranoiacs develop delusions of grandeur in which they endow themselves with superior or unique ability. Such "exalted" ideas usually center around Messianic missions, social reforms, and remarkable inventions Religious paranoids may consider themselves appointed by God to save the world, and may spend most of their time "preaching" and "crusading" to gain adherents to their new cult. Threats of fire and brimstone, burning hell, and similar persuasive devices are liberally employed Such individuals usually become attached to some social reform movement such as prohibition and are tireless and fanatical crusaders, although they often do their cause more harm than good by their self-righteousness and their condemnation of others.

Many paranoiacs develop remarkable inventions which they have endless trouble in patenting or selling. Gradually they become convinced that there is a plot afoot to steal their invention, or that enemies of the United States are working against them to prevent the country from receiving the benefits of their remarkable talents. One patient insisted that the international bankers were out to ruin him, steal his remarkable invention, and profit from it themselves. Hoffman[40] cites the case of a patient who went to Washington to get presidential assistance in obtaining a patent for a flame thrower which, he claimed, could destroy all the enemies of the United States. He would patiently explain who he was. "There's God who is Number 1, and Jesus Christ who is Number 2, and me, I am Number 3." (p. 574)

Aside from his delusional system, the paranoiac may appear perfectly normal in terms of conversation, emotionality, and conduct. Hallucinations and the other obvious signs of psychopathology are rarely found. This normal appearance, together with the logical and coherent way in which the paranoid presents his delusional ideas, may make him most convincing. One well-known clinical psychologist picked up a hitchhiker who stated that he was a professor of sociology at Stanford University and was merely hitchhiking as a means of studying social phenomena at close range—in a sort of laboratory-of-life way. So convincing was the man's story that the psychologist was completely fooled until the rude awakening came later with the man's forced hospitalization as a paranoiac.

The delusional system is apt to be particularly convincing if one accepts the basic premise or premises upon which it is based. For example, the man just described portrayed very convincingly the role of a college professor in sociology, and if one were to accept his status as unquestioned, then his subsequent behavior appeared completely logical. Likewise, where the delusional system develops around some actual injustice, it is difficult to distinguish between fact and fancy. As a result, the individual may convince his family, friends, and well-meaning public officials of the truth of his claims. However, his inability to see the facts in any other light, his typical lack of evidence for his far-reaching conclusions, and his suspicious and uncommunicative attitude when his delusional ideas are questioned, usually give him away.

The following case history deals with a mild paranoid reaction but reveals the development of a logically presented delusional system and the pertinent selection of environmental evidence in an attempt to involve more and more individuals in the supposed conspiracy. Despite her delusional system, however, the patient is not severely out of touch with reality, and there are many nonhospitalized cases in the community who reveal similar symptomatology to a more serious degree.

"This patient was an attractive 31-year-old nurse whose father was a chronic alcoholic and whose mother had died of influenza when she was five or six years of age. As a result the family was disrupted, she and her 4 sisters were separated, and she was raised by various neighbors and friends. She worked her way through high school, was granted financial help as a student nurse, and received her R.N. at the age of 21. She frequently boasted about her sexual prowess, but from her statements it was evident that she had never, at any time, felt the need for attempting to gratify her sexual partners. On the other hand she may actually have been frigid. Her work history was also suggestive of maladjustment. During the eight years preceding her Army service, she had engaged in clinic nursing and private duty, but was unable to hold any position for more than a brief period of time, primarily because of what she termed 'professional differences of opinion about the way things should be done.'

"She was commissioned, October, 1942, a second lieutenant in the Army Nurse Corps. From the very first, she found it difficult to make pro-

fessional and social adjustments with fellow nurses, was unable to get along with enlisted men under her supervision, and was frequently transferred from post to post, apparently because of difficulties arising from overzealousness on her part in carrying out in their detailed minutiae her own interpretation of ward regulations, as well as because of her egotistic overevaluation of the duties assigned her According to one of her fellow nurses, 'She was too precise Everything had to be in its exact place. She believed she was overcapable She never had much psychiatry, but when she was assigned to the [psychiatric] section at our hospital, she believed she could change it completely No one could get along with her'

"In March, 1944, she reached the European Theater of Operations Here . . . she at first made an excellent impression, but soon showed herself to be a perfectionist, a hypercritical and domineering personality who insisted on the immediate, precise, exact and detailed execution of orders Within a 14 week period she was transferred on three separate occasions from post to post, and at each new post her manner and her attitude, despite her precise and meticulous efficiency, constituted a virtual demand that nurses, wardmen, patients and medical officers conform to her exceedingly rigid ideas about the management of ward and even departmental routine

"Nevertheless, she rationalized her failures so plausibly that many of her associates became sympathetic, believing her the victim of an unfortunate love affair 'She never said a word, but we all knew it,' so one of her fellow nurses explained During this same period, however, if one can believe statements which she herself seems to have circulated, she was in the midst of a love affair with an officer whose London flat had previously been owned by a Hollywood star who had equipped it with new and luxurious furnishings of every type.

"During the course of her last assignment, she received every possible help. She requested additional responsibility and was, therefore, assigned, as charge nurse, to the E E N T Clinic, Within a week (July 24, 1944), she lodged a complaint with the commanding officer of the hospital, accusing the enlisted men of conspiring against her, the nurses of lying about her, and the officer in charge, of lack of co-operation She was, therefore, transferred to one of the wards, where she expected wardmen, nurses and patients to execute her orders on the instant, in minute and exact detail, and where she violently berated them because of their inability to do so A week later, the responsible medical officer requested that she be relieved from duty there Instead, she discussed the problem with the chief nurse (Aug 4) and promised to correct her attitude Within four days, the patients as a group requested her removal. Two weeks later, the ward officer repeated his request She was, therefore, given a five-day leave, and during her absence all ward personnel were contacted in an attempt to help her adjust when she returned to duty

"During this period she became convinced that she was being persecuted She grew tense and despondent, kept rigidly to herself, was unable to sleep in a room with a ticking clock, and frequently burst into tears As she herself said, 'Some of the nurses deliberately went out of their way to annoy and criticize me They wanted to make me trouble That's why I was so upset' On three separate occasions, she requested the appointment of a Board of Officers to investigate these alleged discriminatory acts Finally (September 1) she demanded that a Board of Officers be convened to determine her efficiency as a nurse Instead, she was ordered to report to our hospital for psychiatric observation.

"On admission, few details of her military history were known She seemed alert and cooperative, was well oriented in all three spheres, and was thought to be in complete contact Extreme care, however, was necessary when addressing her Even fellow patients would warn newcomers to the ward, 'Be careful what you say when she's around. She won't mean it, but she'll twist your statements without changing your words, and give them some meaning you never intended' In addition, she was bitter about the unfair treatment she had received in the Army,

wished to reform the Medical Department and the Army Nursing Corps, and indignantly repudiated the existence of any condition that could justify placing her under NP observation As a result, she was at first thought to be an obsessive-compulsive personality with paranoid tendencies, and it was believed she could be returned to duty While under observation, however, she became unco-operative, aloof and seclusive She preened constantly, and was exceedingly coquettish whenever men of any rank or grade appeared on the ward she was meticulous and precise, argumentative and domineering, hypercritical of others but upset by even the slightest hint of criticism directed against herself, and constantly antagonizing all with whom she came in contact Rapport superficially appeared excellent, but few details could be obtained about her background Her apparently frank and detailed answers, when analyzed, were seen to be verbose and digressive evasions

"She was constantly complaining, 'These nurses dislike me because I'm so efficient That's why they discriminated against me And the enlisted men didn't like taking orders from me That's why they lied about me . It doesn't seem credible but they actually got together in a sort of conspiracy [against me] . And he [the officer in charge of the E E N T Clinic] backed them up he deliberately misrepresented the facts' And she adduced fact after fact which apparently supported this conclusion of hers

"The diagnosis of 'paranoia, true type' was made, and she was returned to the United States, *one month after admission to the hospital*, a rigid and overzealous individual whose inelasticity had antagonized her associates and aroused severe emotional strain within herself, firmly convinced that she was being persecuted because of the necessary and badly needed work which she had much too efficiently performed And by one of those fortuitous circumstances that nevertheless occur so frequently, she was received in the States as a patient in the very hospital to whose psychiatric section she had previously, for so brief a period of time, been assigned as ward nurse.

"Her civilian adjustment, so far as we were able to determine from letters sent to the other nurses, was at first without untoward incident. However, by June, 1948, it seemed likely that she would again need psychiatric hospitalization, this time under the Veterans Administration . She had married a chronic alcoholic and soon separated from him, became tense and depressed, and gave every evidence of having her psychosis reprecipitated" (Rosen and Kiene[89], pp 330-333)

Paranoid patients are not always as dangerous as we have been led to believe by popular fiction and drama, but there is always the chance that they will decide to take matters into their own hands and deal with their enemies in the only way that seems effective In one instance, a paranoid became convinced that the school board was discriminating against him and shot and killed most of the members of the board. In another case a paranoid shot and killed a group of seven persons who he thought were following him The number of husbands and wives who have been killed or injured by suspicious, persecuted mates is unknown but undoubtedly large Even, postmen have been falsely accused of withholding mail, and some have actually been killed by paranoids bent on stopping the activities of their "enemies."

PARANOID STATES

In paranoid states the delusions are less systematized and bridge the gap between the paranoid proper and the paranoid schizophrenic There is often some evidence of disordered thought processes, as well as hallucinations and other psychopathological symptoms, but without the severe personality disorganization, thought fragmentation, and loss of contact with reality which are found to be typical of paranoid schizophrenics

In many cases these delusional systems develop rather suddenly, often following some particularly traumatic life experience They are usually transient and of short duration,

clearing up spontaneously without psychotherapy In some cases, however, they may become persistent and chronic As in the case of the paranoid proper, such individuals are often able to maintain their status in the community, although they are potentially dangerous as a result of their ideas of persecution

Hoffman[40] gives a good description of a paranoid state in the following case of a patient who came to Washington to obtain "justice" and was taken into custody at the White House when he demanded to see the President

"He had traveled from the East Coast to the West Coast several times, holding no less than 40 different jobs—usually as a baker. Eight years before his hospitalization he began studying astrology Soon after this he began seeing multicolored lights and began hearing imaginary voices which claimed to come from members of the Ku Klux Klan and from Nazi followers of Hitler They followed him wherever he went. Pictures of Christ were flashed on his work bench, and he heard the voices of God and of Christ His life was threatened He left Oakland, California, where he had been working, for another city The voices followed him and put an apparatus on his car which shifted gears for him and made him speed up while in slow-going city traffic, and also made him go backward when he wanted to go forward As soon as he arrived in the city he reported all this to a District Attorney there who advised him that this was a matter of national importance and should be reported to the federal authorities He thereupon came immediately to Washington to present this information to the President in the interests of and for the protection of the United States Government and the American people" (p. 574)

GENERAL DYNAMICS

In paranoid disorders, as in the other psychoses, both the long-term developmental trends and the precipitating stress situation must be studied if we are to have the whole picture Again our three-level approach will be helpful

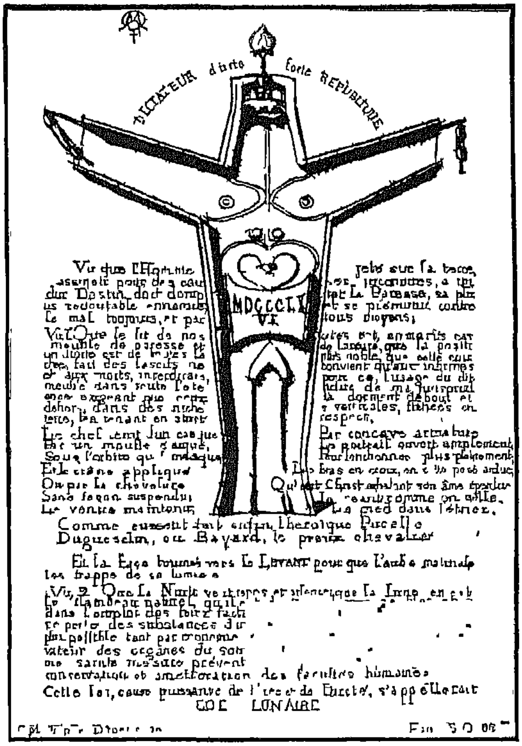
Biological factors. Although heredity and constitutional factors have received considerable attention in paranoid reactions, no evidence of "tainted" heredity or a particular type of constitution has been found Kretschmer[56] maintained that paranoiacs were constitutionally asthenic, but in a study of 8 cases in the Armed Forces, Rosen and Kiene[80] found no predominance of any bodily type.

Nor has any consistent medical evidence of head injury, focal infections, endocrine dysfunctions, or other general organic or brain pathology been found. However, in a postmortem study of 200 cases of paranoid states, Pollak[84] did find an incidence of tumors of the endocrine glands and also of the exocrine tissue ten times higher than in nonparanoid patients. In general, the incidence of pathology of the ductless glands was four times higher than in nonparanoid psychotics Pollak came to no final conclusion concerning either the time correlation or the causal significance of these morphologic findings in relation to the psychiatric symptoms In the 8 patients studied by Rosen and Kiene, 2 had previously had cholecystectomies

Psychological factors It is the psychological factors that seem to be all-important in the etiology of paranoid disorders Some of these have their origin in early childhood, some in the individual's later development

1. *Parent-child relations* Our knowledge of early developmental trends in paranoid patients is inadequate, though paranoid reactions in adult life do seem to develop out of certain specific childhood trends As children, most of these individuals seem to have been aloof, suspicious, seclusive, stubborn, and resentful of discipline (Miller[74]) When crossed, they become sullen and morose. Rarely do they show a history of normal play with other children or good socialization in terms of warm, affectionate relations with other persons Many of them have lost parents at an early age.

In many cases, they appear to have been exposed as children to parental oversolicitude, leading to a "spoiled child" type of personality. As a result, they may have an unrealistically high self-evaluation and unreasonable goals which make social adjustments outside the family difficult for them. Since these individuals do not get along well with others, they often become aloof and seclusive and defend their hurt feelings and oversensitivity to criticism by a hypercritical attitude. Their failure in adequate socialization apparently leads to an inadequate understanding of the motives of other persons and to the suspicious misinterpretation of mistakes and unintentional slights of other persons. Since they must maintain the illusion of their own unique superiority, as established by their parents, a projection of their failures and shortcomings is an almost inevitable defense when things go wrong.



Courtesy Art Institute of Chicago

"The Law of the Moon." Here a psychotic artist, Charles Meryon, portrayed a "strange, cruciform, hollow structure, which, according to Meryon's inscription, is at the same time a lamp and a bed in which men ought to sleep standing in order to overcome temptation. . . . the drawing reveals an unconscious erotic conflict. . . ." (Born[12], p. 233)

In later personality development these early trends merge into a picture of self-important, arrogant, rigid, suspicious individuals who long to dominate, blame others freely, quickly sense insult and mistreatment, and have little faith in the motives of others (Brickner[14]). Their goals and expectations are unrealistically high, yet they refuse to make any concessions in meeting life's problems by accepting more realistic goals. They expect to be praised and appreciated for even minor achievements and when such praise is not forthcoming, they sulk and withdraw from normal contacts. Although such individuals may have broad interests and appear normal in general behavior, they are usually unable to relate themselves closely to other persons; they appear inaccessible, are overly aggressive, and maintain a somewhat superior air.

2. *Inferiority.* Most authorities on the subject stress the role of strong inferiority feelings in the development of paranoid reactions. Although inferiority feelings are masked behind the paranoid's air of superiority and self-importance, they are manifested in many aspects of his behavior. Rosen and Kiene[89] point out that clues in profusion were found in the pathetic craving of their patients for praise and recognition, in their hypersensitivity to criticism, in their exact and formal adherence to socially approved behavior, and in their conscientious and overzealous performance of the most minute occupational duties.

3. *Failure and conflict.* Now what happens to this egotistical, prideful, sensitive, inflexible individual when he is faced with actual failure in the achievement of his goals or when he catches a glimpse of impulses or desires he thinks are beneath him?

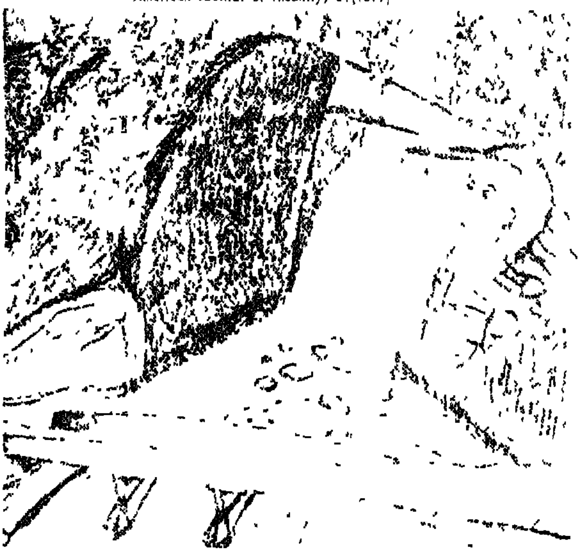
Any failure will be highly disturbing to him and will bring unbearable feelings of inferiority, and perhaps, depending on the nature of the failure, guilt. These intense

feelings of inferiority jeopardize his picture of himself as an individual with remarkable talents, undermine his feelings of adequacy and self-esteem, and expose his sensitive and easily wounded pride to the lowered valuation, scorn, and ridicule of others.

To defend himself against this catastrophic situation, he has to project the blame for his failure onto others. Now he has failed not because of any inferiority or lack on his part but because others are envious of his great ability and are working against him. With this as his fundamental defensive premise he then proceeds to distort and falsify the facts to fit it and gradually develops a logic-tight, fixed, delusional system. Cameron[16] refers to this as the building up of a "pseudo community" in which the patient organizes the individuals around him and certain fragments of their behavior into an expanding delusional system. Everything comes to be interpreted in terms of this system and the most trivial events may take on an ominous meaning. If a fellow worker drops a wrench near him, he may be convinced that an attempt has been made on his life. Even the casual conversation of others may have a hidden and sinister meaning.

The drawing of the paranoid patient is usually less abstract and less confused than that of the schizophrenic, with more definitive form and content. Paranoid delusions may be represented in an allegorical or symbolic way (as here, by a rock in the shape of a child's head, drawn on the bank of a torrent). Sometimes there is a foreign object in an otherwise fairly naturalistic landscape (in this case, a fetish-shoe). (Born[12])

After A. Hrdlicka, "Art and Literature in the Mentally Abnormal," American Journal of Insanity, LV (1899)



In many cases, as was brought out in the case of the paranoid schizophrenic, the attention the individual thinks he is receiving leads him to feel that he must be a person of some importance or his enemies would not go to all this trouble. The particular content of the grandiose ideas is closely related to the individual's education, vocation, and special interests. A paranoid with strong religious convictions may develop the notion that he is a great religious savior, whereas the individual interested in mechanics would probably envision himself a great inventor. In one case it was pointed out to the patient that if his enemies were persecuting him in the way he insisted, it would be costing them about $10,000 per day, which was obviously a ridiculous figure. The patient drew himself up proudly and replied, "Why shouldn't they? After all, I am the world's greatest atomic scientist."

The role of reaction sensitivity in the development of these delusional systems should be emphasized. Once the individual begins to suspect that others are working against him, he carefully notes the slightest signs which point in the direction of his suspicions and ignores all evidence to the contrary. With this frame of reference it is of course quite easy in our highly competitive, somewhat ruthless world to find ample evidence that others are working against us. And the individual's very attitude leads him into a vicious circle, for his suspiciousness, distrust, and criticism of others drive his friends and well-wishers away and keep him in continual friction with other people, generating new incidents for him to grasp hold of and magnify. Often people do in fact have to conspire behind his back as to

how best to keep peace and cope with his eccentricities

4. *Sexual maladjustment* As in the case of most psychopathological reactions, sexual as well as other personality areas are involved If the child has been brought up with rigid sexual morals and a self-righteous and prudish attitude toward all "immoral" behavior, he is apt to look upon himself as being above such morbid passions Even normal sexual impulses then become extremely disturbing to him, and he resorts to projection and other undesirable measures to defend himself This difficulty, again, is further intensified by his poor socialization and his lack of exposure to the informal sex education which most children obtain from one another.

Complete case histories of paranoiacs almost invariably show evidence of sexual maladjustment Although all of the patients studied by Rosen and Kiene[80] claimed what they termed normal sexual and heterosexual development, these investigators report that only one of these patients dared attempt the marriage relationship Interestingly enough, this patient chose as her husband a chronic alcoholic eleven years her senior whom she divorced after four years of marriage. With this man she was apparently sexually incompatible although whether this was due to frigidity on her part or to sexually deviate practices on his was not clear. For not marrying, other patients gave such reasons as having too many family responsibilities, and never meeting the right man Most of the patients followed an exceedingly rigid moral code relative to sexual behavior and attempted to enforce this code upon others The only patient who preened herself on her sexual prowess was so exhibitionistic and coquettish that there is some question as to whether this activity was not designed to enhance her self-esteem rather than for sexual gratification In fact, indications were that she may have actually been frigid

Homosexual conflicts too have been frequently found in paranoia The paranoid is similar to the schizophrenic in that his sexual development typically has not progressed beyond a very immature and undifferentiated level As a result, his sexual fantasies usually include various objects, including homosexual as well as heterosexual ones Such desires he regards as immoral and utterly unacceptable, so that they are of course extremely disturbing to him and lead to intense feelings of inferiority and guilt To defend himself against this unbearably painful self-devaluation, the paranoiac may project his homosexual impulses to another person who now becomes the aggressor who is trying to seduce him

Occasionally the projection may take a more complicated form in which the individual's accusations of infidelity toward his wife may actually represent an ego defense against his own homosexuality In one case the patient was sure that his wife had been unfaithful to him on numerous occasions because when salesmen came into their business establishment, he, the patient, had an erection In this case the patient could not accept his own erotic arousal and therefore projected the sexual desire to his wife, who now was charged with infidelity This factor of homosexuality was strongly emphasized by Freud, who concluded that paranoia represents, primarily, the individual's attempt toward the repression of homosexual tendencies which the ego is not prepared to acknowledge or entertain (Thornton[99]) However, as Thornton points out, there is dubious justification for attributing a homosexual component to all cases of paranoia, and this tends to be borne out by the available clinical evidence on paranoid cases For although repressed homosexuality may play an important role in some cases of paranoia, we find that in the great majority of cases the dynamic core of the disorder cen [illegible] feelings of inferiority and inadequacy growing out of a failure to achieve the aspirations and goals which the individual has adopted and considers his just due

5. *Guilt* In certain types of persecutory reactions, guilt feelings over immoral or un

ethical behavior seem to play an important role. Here the individual apparently cannot tolerate the self-devaluation resulting from his failure to live up to his moral ideas and his high opinion of himself He may either unconsciously seek punishment for his unpardonable behavior in various ways or project it to others in more typical paranoid style.

It is not uncommon here for a husband who has been unfaithful to his wife, or who has strongly wanted to be, to become suspicious of his wife's behavior and to come to the conclusion that she has been unfaithful to him In the novel *Treasure of Sierra Madre,* by Bruno Traven[102], we have an excellent portrayal of the way this mechanism may work One of the leading characters has strong impulses to kill his partner and steal the gold they have accumulated Such thoughts are ethically unacceptable to him, however So, unconsciously of course, he projects them onto his partner, becoming convinced that the partner is trying to murder him and steal the gold In self-defense he then attacks his partner, leaves him presumably dead, and makes away with the gold himself

In the more transitory and less systematized paranoid state, the dynamics are the same as in paranoia proper, although the projection and compensation are used on a much more elementary level and without the systematic elaboration of the true paranoid Here the paranoid trends may be transitory and in any event usually clear up with the clearing of the general clinical picture (Miller[74]). Paranoid trends and states often color the clinical picture in many other types of psychopathological reactions

Sociological factors. Paranoiacs tend to come from higher educational and socioeconomic levels The exact significance of this for the development of paranoid reactions, however, is not clear although the goals of their social group as a whole are so high as to be inevitably impossible of attainment for many members of the group Yet most members of the group adopt these goals as their own, and struggle against impossible odds in trying to measure up to the unrealistic standard.

THERAPY AND PROGNOSIS

In the early stages of paranoia, psychotherapy or a combination of psychotherapy and shock therapy may be effective In more fully developed cases, the delusional system is extremely resistant to change and all forms of psychotherapy have so far proved inadequate, although occasional recoveries are reported. Some hope, too, is still held for the use of psychosurgery, whose possibilities have not as yet been fully explored. In general, however, paranoia must be classified as a chronic disorder in which the chance of recovery is slim.

Unfortunately, the hospitalization of these patients frequently presents a serious problem. Because of a lack of adequate facilities for long-range psychotherapy and the generally resentful attitude of the patient, hospitalization often seems more of a punishment than a treatment procedure Paranoiacs are apt to regard themselves as superior to other patients as well as to the doctors. They often complain that their families and the hospital staff have joined their enemies, and refuse to cooperate in treatment

Eventually, however, hospitalization may "sober" the patient, to the extent that he realizes that failure to curb his actions and ideas will result in prolonged hospitalization As a result, the patient may make a pretext of renouncing his delusions, admitting that he did hold such ideas but claiming that he now realizes they are absurd and has given them up After his release he is often more reserved in expressing his ideas and in annoying other people, but he is far from recovered

In a study of 72 cases of paranoid disorder (out of a total of 290 cases) who showed relatively good recovery, it was found that the prognosis was poorest when the prepsychotic personality presented the classic paranoid developmental pattern Among the factors making for a favorable prognosis were

a happy marriage, and the seeking of advice and assistance by the patient (Miller[74])

As we have noted, paranoid states are usually transitory, so that the prognosis here is much more favorable than in paranoia proper Psychotherapy is important in minimizing the possibilities that such reactions will become chronic and in strengthening the ego structure of the patient so that he will not be so apt to break down again under stress.

AFFECTIVE DISORDERS

The psychotic reactions discussed so far have been mainly disorders of the thought processes with a certain amount of accompanying emotional blunting and distortion We come now to the psychotic reactions in which the disturbance is primarily emotional In our preliminary classification three types of psychoses were listed as affective disorders (1) manic-depressive reaction, (2) psychotic-depressive reaction, and (3) involutional melancholia *

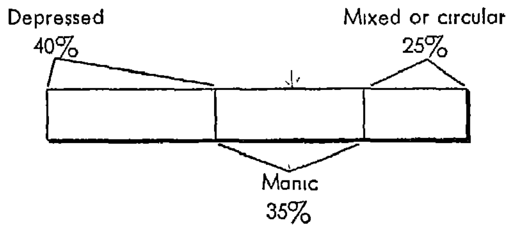
MANIC-DEPRESSIVE REACTION

Descriptions of manic-depressive reactions are found among the early writings of the Egyptians, Hebrews, and Greeks The great Greek physician, Hippocrates, classified all mental disorders into three general categories —mania, melancholia, and phrenitis—and his descriptions of mania and melancholia, based upon the clinical records of his patients, are strikingly similar to modern clinical symptomatology

The sixth-century physician Alexander Trallianus was perhaps the first to recognize recurrent cycles of mania and melancholia in the same person, thus anticipating by several hundred years Bonet's (1684) "folie maniaco-mélancolique" and Falret's (1854) "folie circulaire." It remained for Kraepelin (1899), however, to introduce the term *manic-depressive psychosis* and to clarify the clinical picture. Kraepelin described the disorder as a series of attacks of elation and depression, with periods of relative normality in between and a generally favorable prognosis Although Kraepelin's early views have been somewhat modified, his clinical description was a major step forward

Some patients evidence only manic reactions, others only depressive reactions, still others show both types of reaction, either alternating between the two or showing a combination of manic and depressive reactions at the same time Although at the present time various classifications are in use, we may distinguish three major types of manic-depressive reactions (1) manic reactions, (2) depressive reactions, and (3) circular and mixed reactions.

COMPARATIVE INCIDENCE
OF MANIC-DEPRESSIVE TYPES



The median age at the time of first admission is approximately 40 The great majority of cases occur between the ages of 20 and 55 although manic-depressive reactions may occur from early adolescence to old age Rennie and Fowler[88] report an age range from 14 to 65 for first attacks The sex ratio is about 3 to 2, with women showing the highest rate Manic-depressive cases constituted 8 4 per cent of all first admissions to mental hospitals in 1947.

General symptoms. The clinical picture in manic-depressive reactions is colored by the predominant emotional mood of the patient,

* To avoid needless repetition of material on depressive reactions, we shall limit our discussion of affective disorders to manic-depressive reactions and involutional melancholia

which may be one of elation or depression Against this affective background, there may be a variety of psychological and behavioral symptoms which are roughly appropriate to the prevailing mood. Delusions and hallucinations are common in both manic and depressive reactions In manic reactions, these commonly include delusions of grandeur. In depressive reactions, delusions center around self-blame and self-depreciation The patient may believe that he is dead, that his body has changed, that he is suffering from some terrible disease, that he is sinful and immoral In older depressive patients (those over 50) the delusional content typically centers around ideas of poverty, fear of being destroyed, poisoned, or contaminated by feces, of being tortured in some terrible manner, or of being doomed to die in loneliness and poverty

Rennie and Fowler[88] cite the following examples of the chief types of hallucinations found

> ". . . conversed with God, heard sentences—'daughter is dead', saw iceberg floating, bottle of carbolic in ceiling, voices in gramophone, people talking through stomach, saw star on Christmas day; saw and heard dead mother, voices tell her not to eat, to walk backwards, sees something white—a vision; saw path of fire running up and down, saw and heard God and angels, saw snake coming to her, trees glitter like gold, saw dead father; animal faces in food, saw and heard animals, heard voices, voices—'they've got me now', sees dead people and skulls (patient very superstitious); brother's and dead people's voices, God's voice, sees devil and Hell's flames; saw God, sees husband and coffin, hand pointing to cross, sees her babies in heaven, voice says 'Do not stay with husband', sees snakes and Negroes, two men digging a grave, saw fire and fire engine repeatedly" (p 805)

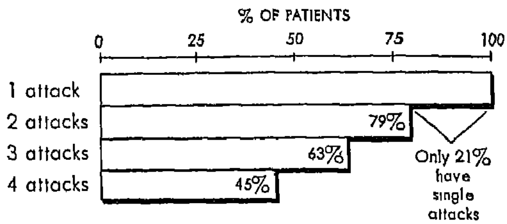
Other behavioral symptoms noted by Rennie and Fowler included such items as:

> "refused medicine, hoarding, demanding, spitting, wetting and soiling on floor, self-exposure, stupor or pseudo-stupor, soiling because too weak to go to toilet, draping self in bedclothes; grimacing, smearing, naked, gruesome interests, tantrums, confabulations, panic, bedwetting, fear with screaming of being killed . . ." (p. 805)

These symptoms will be further clarified in our subsequent discussion of reaction types

Manic-depressive reactions are of short duration, as psychoses go They come in the form of attacks which seem to run their course with or without therapy; afterwards the patient usually returns to a state of normalcy and shows no evidence of mental deterioration However, the attacks tend to recur·

RECURRENCE OF MANIC-DEPRESSIVE ATTACKS



The average length of the first attack was 6½ months— 3½ for manic and 9½ for depressive patients with recovery The shortest attack was 3 days and the longest 36 months The attacks tend to become prolonged as they recur, especially after age 45 Stern[96] concludes that repeated attacks reduce the psychological resistance of the patient so that in advanced cases very trivial events may precipitate the manic or depressive reaction.

Manic reactions. Manic reactions are characterized by varying degrees of *elation* and *psychomotor overactivity*.* Three degrees are commonly delineated, denoting the progression of behavior from mild to extreme degrees of manic excitement. Though these attacks differ in degree rather than kind, they merit separate consideration.

* Actually, manic reactions are often impure in the sense that worry, sadness, and brooding often complicate the predominantly elated emotional mood It is also common to find underlying depression close on the heels of elation In fact, the manic attack is often considered a defense against depression

1. *Hypomania.* This is the mildest form of manic reaction and is characterized by moderate elation, flightiness, and overactivity. The patient states that he has never felt better or happier in his life He has unbounded confidence in his ability and knowledge and will unhesitatingly express his opinion on any and all subjects. His thinking is speeded up and he may become particularly witty and entertaining. The patient seems nonfatigable and gets practically no sleep but states that he feels so well that he doesn't need any During the day he engages in ceaseless activity, talking, visiting, keeping luncheon and other engagements, telephoning, writing, and working on various sure-fire schemes Numerous appointments are made, postponed, and canceled The mails frequently seem too slow to these patients, and they are fond of sending telegrams and special-delivery letters and making long-distance telephone calls

The overall picture frequently appears at first to be one of an aggressive, brilliant, sociable individual who has many commendable enthusiasms and wonderful plans for the future However, he soon becomes domineering, monopolizes the conversation, and shows difficulty in sticking to the subject He is intolerant of criticism and may unsparingly denounce as a stupid fool anyone who dares to disagree with him or interfere with his plans. The details of his plans are seldom worked out, very few of them are ever put into action, and those few are not completed However, the patient easily rationalizes his activities and concedes no mistakes He spends money recklessly and in a short period of time may dissipate his entire savings. Moral restraint gives way and the patient may engage in numerous promiscuous sexual acts and in alcoholic excesses.

Although these patients rarely show marked delusions or hallucinations, they show very poor judgment and usually lack insight into their condition Any suggestion that they are ill and should be hospitalized is met with angry abuse They are ready with a rebuttal to all charges made against them and threaten legal action against anyone who dares to touch them.

The following conversation with a hypomanic patient reveals the elated mood and pressure toward activity typical of this reaction pattern The patient was a woman of forty-six.

Dr Hello, how are you today?

Pt Fine, fine, and how are you, Doc? You're looking pretty good I never felt better in my life. Could I go for a schnapps now? Say, you're new around here, I never saw you before—and not bad! How's about you and me stepping out tonight if I can get that sour old battleship of a nurse to give me back my dress It's low cut and it'll wow 'em Even in this old rag, all the doctors give me the eye You know I'm a model Yep, I was No. 1—used to dazzle them in New York, London and Paris. Hollywood has been angling with me for a contract

Dr Is that what you did before you came here?

Pt I was a society queen . . . entertainer of kings and presidents I've got five grown sons and I wore out three husbands getting them . . . about ready for a couple of more now There's no woman like me, smart, brainy, beautiful and sexy You can see I don't believe in playing myself down If you are good and know you're good you have to speak out, and I know what I've got.

Dr Why are you in this hospital?

Pt That's just the trouble. My husbands never could understand me I was too far above them I need someone like me with savoir faire you know, somebody that can get around, intelligent, lots on the ball. Say, where can I get a schnapps around here—always like one before dinner. Someday I'll cook you a meal I've got special recipes like you never ate before . . . sauces, wines, desserts Boy, it's making me hungry. Say have you got anything for me to do around here? I've been showing those slowpokes how to make up beds but I want something more in line with my talents

Dr What would you like to do?

Pt Well, I'm thinking of organizing a show, singing, dancing, jokes I can do it all myself but I want to know what you think about it I'll bet there's some schnapps in the kitchen, I'll look around later You know what we need here . a dance at night I could play the piano, and teach them the latest steps Wherever I go I'm the life of the party

2. *Acute mania* The symptoms in acute mania are similar to those in hypomania but are more pronounced This condition may develop out of a hypomanic reaction or may develop suddenly with little or no warning except for a short period of insomnia, irritability, and restlessness Elation and pressure of activity become more pronounced, and the patient may laugh boisterously and talk at the top of his voice He becomes increasingly boastful, dictatorial, and overbearing, and may order everyone around as if he were a super-dictator

Irritability is easily provoked and the patient's mood may change rapidly from gaiety to anger Violent behavior is common and the patient may break up furniture, deface the walls, and even assault nurses and other patients He is continually on the go, walking back and forth, gesturing to himself, singing, and banging on the walls and door demanding release Even patients who have had the most rigid moral backgrounds will show a complete abandonment of moral restraint, and may be obscene in their talk, expose themselves, and make sexual advances to those around them.

There is a wild flight of ideas, frequently leading to incoherent speech The alternation in ideas may be so rapid that at one moment the patient may engage in erotic activities and the next deliver a profound religious dissertation. There may be some confusion and disorientation for time, place, and person, with a tendency to misidentify those about him For example, other patients may be mistaken as old friends

Transient delusions and hallucinations may occur, in which the patient may have grandiose ideas of wealth and abilities or in which he may hear voices and carry on conversations with persons whom he imagines to be present. Occasionally there may be short periods of relative calmness in which the individual shows some insight into his noisy behavior, and he may even apologize for it. In general, however, insight and judgment are severely impaired, and periods of insight are shortly followed by a resumption of manic activity The outstanding symptoms in acute manic reactions are the irritable and elated mood, and the increased flight of ideas and psychomotor overactivity

The following brief description of an acute manic reaction will serve to illustrate some of the typical symptoms.

"On admission she slapped the nurse, addressed the house physician as God, made the sign of the cross, and laughed loudly when she was asked to don the hospital garb This she promptly tore into shreds She remained nude for several hours before she was restrained in bed She sang at the top of her voice, screamed through the window, and leered at the patients promenading in the recreation yard She was very untidy and incontinent, smearing her excreta about the floor and walls Frequently she would utter the words, 'God, Thou Holy One,' cross herself, laugh, and then give vent to vile expletives while she carried out suggestive movements of the body She yelled for water, and, when this was proffered, she threw the tin cup across the room" (Karnosh and Zucker [51], p 78)

3. *Delirious mania* In the most severe type of manic reaction the patient is confused, wildly excited, and violent The condition may develop out of hypomania or acute mania but more frequently appears suddenly and with very few warning signs The patient is incoherent and severely disoriented He has no appreciation of his surroundings, and may have vivid auditory and visual hallucinations. It is impossible to converse with him or to

hold his attention He evidences the most extreme psychomotor overactivity, is violent and destructive, and spends his days and nights in restless pacing, singing, screaming, gesticulating, and incoherent shouting His eyes may show a peculiar glare and his features may be contorted beyond recognition One moment he may refuse food and the next devour everything he can get hold of His behavior is obscene and entirely shameless, and personal habits completely deteriorate He may smear his excreta on his person or about the walls He is extremely dangerous to those about him and may seriously injure himself In short, he fulfills the popular notion of a raving maniac

In this condition the patient loses weight rapidly and may become utterly exhausted. A tremendous burden is placed on all bodily functions, and the chances of self-intoxication and infection by various diseases are very great

To illustrate this extreme excitement reaction, the author is reminded of a scene which took place in the courtyard of a state mental hospital during the middle thirties

A manic patient had climbed upon the small platform in the middle of the yard and was delivering an impassioned lecture to a number of patients sitting on benches which surrounded the platform Most of the audience were depressed patients who were hallucinated and muttering to themselves and not paying a bit of attention to the speaker However, the speaker had an "assistant" in the form of a hypomanic patient who would move rapidly around the circle of benches shaking the occupants and exhorting them to pay attention to the speaker If anyone started to leave, the assistant would plump him back in his seat in no uncertain terms. In the background were a number of apparently schizophrenic patients who were pacing a given number of steps back and forth, and beyond was the high wire fence which surrounded the yard.

The speaker herself was in a state of delirious mania She had torn her clothing to shreds and was singing and shouting at the top of her voice So rapidly did her thoughts move from one topic to another that her "speech" was almost a complete word hash, although occasional sentences such as "You goddam bitches" and "God loves everybody, do you hear?" could be made out These points were illustrated by wild gestures, screaming climaxes, and outbursts of song In the delivery of her talk, she moved restlessly back and forth on the platform, occasionally falling off the platform in her wild excitement Her ankles and legs were bleeding from rubbing the edge of the platform during these falls, but she was completely oblivious to her injuries

Fortunately, the degree of excitement in manic reactions can usually be markedly reduced by means of sedatives, hydrotherapy, and electro-shock, and scenes such as this need no longer occur

Depressive reactions. The symptom picture in depressive reactions is essentially the opposite of that in manic reactions Here, too, there are differences in degree

1. *Simple depression* The outstanding symptoms in simple depression are a loss of enthusiasm and a general slowing down of mental and physical activity The patient feels dejected and discouraged Work and other activities require tremendous effort and somehow do not seem worth bothering with anyway Feelings of unworthiness, failure, sinfulness, and guilt dominate his sluggish thought processes His loss of interest in things about him extends even to eating and is usually reflected in loss of weight and digestive difficulties, such as constipation Conversation is carried on in a monotone and questions are answered with a meager supply of words In general, the patient prefers just to sit alone, contemplating his sins and seeing no hope for the future.

Despite the mental and motor retardation however, the patient shows no real clouding of consciousness or actual disorientation His memory remains unimpaired and he is able to answer questions fairly satisfactorily i

A Manic Episode

From a case study by E. J. Wiggins and R. S. Lyman[100]

These pictures show the sequence of events during the first two days of a manic attack suffered by a 57-year-old Negro who had always been a hard worker, owned a farm, and was respected by the whole community. In his youth he had been converted during a revival meeting. Since the age of 35 he had been a deacon in his church. Often, when troubles had weighed heavy he had found relief singing and praying until his discouragement lifted. His first marriage had been happy, but a second marriage, following the death of his first wife, was very unhappy. In close succession the patient had suffered several emotional shocks and worries. An epileptic son was finally sent to the state hospital and died soon thereafter, the crops were bad and debts very heavy.

During this period he worked unusually hard and seemed to have an abnormal amount of energy, without ever being fatigued. When $500 arrived from his son's insurance, he interpreted it as coming from God as a first payment on his debts and was confident that the rest would come in the same way.

Then one day, while stripping tobacco, he suddenly jumped up shouting that the "spirit" had overtaken him. He said later that he had begun to get commands to jump up and roll over like a wheel, and then "to holler and praise the Lord and make a noise enough so He can hear you." He tried to get the others to follow his lead, and eventually fell down exhausted. He believed that he could stop the war if he could just get all the neighbors to take part in joint prayer.

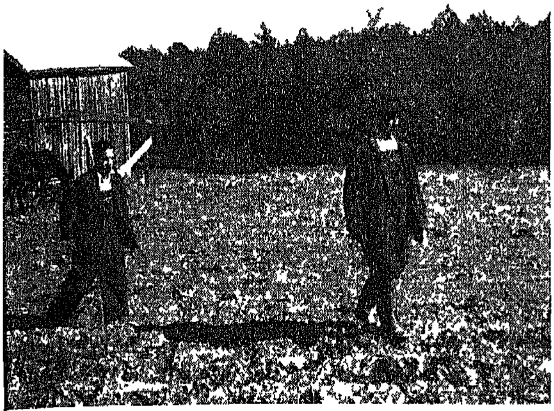








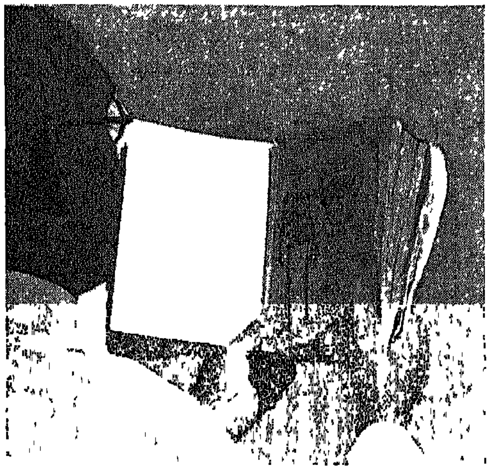




He told the doctors later, "I was joy at heart—That is why I couldn't stay still I had to go talk with somebody and tell them how much joy"

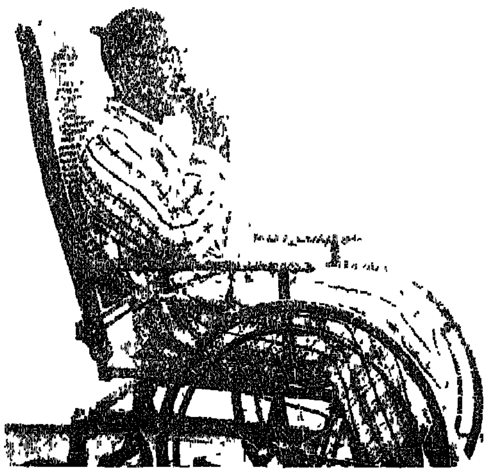


The next morning he started out to walk to a neighbor's but was forcibly detained by his son, who carried him back and locked him in his room, where he busied himself reading a "doctors' book" The local doctor came, but had nothing to suggest



When several days passed with no change, the family put the patient in the car and took him to the hospital, where he was happy and talkative and freely told the doctors his whole life history His excitement was evident in the speed and intonation of his words, rather than in any bizarre behavior There was little treatment beyond a quiet schedule By the end of the first month there was a marked reduction in manic activity and after another month he had recovered, apparently completely

He was sent home from the hospital soon thereafter and about three months after the onset of the attack, the whole family went through a re-enactment of the entire episode, under the supervision of one of the hospital staff The patient reported that this re-enactment did much to relieve the fears he had been having in thinking back over his psychotic experience, and that now he could laugh at it although he still could not understand it At an earlier stage such a re enactment would undoubtedly have heightened his anxiety



Throughout his life the patient had had three outlets of emotional expression—work, family, and religion It is notable that in his manic episode he used the same outlets, particularly the latter, and, by feeling that he had won a superior place in God's favor, was able to achieve a feeling of authority over everyone else without challenging or rebelling against the rules of society

allowed sufficient time Many of these patients have some insight into their condition and understand that they need treatment, although they may not admit that they are depressed but rather emphasize various bodily ailments such as headaches, fatigue, loss of appetite, constipation, and poor sleep In fact, mild depressive cases are sometimes diagnosed as neurasthenia In depressive reactions, however, the patient usually insists that his ailments and other difficulties are punishment for various mistakes and sins committed in the past The following is a conversation with a young woman of twenty-five who was classified as a mild depressive

Dr Good morning, how are you today?

Pt (Pause) Well, o k. I guess doctor . I don't know, I just feel sort of discouraged

Dr Is there anything in particular that worries you?

Pt I don't know doctor everything seems to be futile . . . nothing seems worth while any more It seems as if all that was beautiful has lost its beauty I guess I expected more than life has given. It just doesn't seem worth while going on. I can't seem to make up my mind about anything I guess I have what you would call the "blues"

Dr Can you tell me more about your feelings?

Pt Well . . . my family expected great things of me I am supposed to be the outstanding member of the family they think because I went through college everything should begin to pop and there's nothing to pop I . I really don't expect anything from anyone Those whom I have trusted proved themselves less than friends should be

Dr Oh?

Pt Yes, I once had a very good girl friend with whom I spent a good deal of time She was very important to me I thought she was my friend but now she treats me like a casual acquaintance (tears)

Dr Can you think of any reason for this?

Pt Yes, it's all my fault I can't blame them—anybody that is I am not worthy of them. I have sinned against nature. I am worthless nobody can love me I don't deserve friends or success

Dr You sinned against nature?

Pt Well . . I am just no good I am a failure. I was envious of other people I didn't want them to have more than I had and when something bad happened to them I was glad. Now I am being repaid for my sins All my flaws stand out and I am repugnant to everyone (Sighs) I am a miserable failure. . .

2. *Acute depression* In acute depressive reactions the r[illegible] on is increased [illegible] as-ingly inactive, tends to isolate himself from others, does not speak of his own accord, and is extremely slow in his responses Feelings of guilt and worthlessness become more pronounced and the patient becomes increasingly self-accusatory He may hold himself responsible for plagues, floods, or economic depressions, and insist that he has committed all sorts of horrible sins which will bring disaster upon everyone Delusions may take a hypochondriacal turn, and in keeping with his morbid mood, the patient may believe that his brain is being eaten away, that his "insides are slowly petrifying," or that his bowels are completely stopped up One patient maintained that he had not had a bowel movement for over a month The patient may refuse to eat because he has no stomach and is only a "living shell."

These ailments are usually blamed on early sex practices or other sins which have undermined the patient's health and for which he is now being punished

The patient's prognosis for himself is very unfavorable He sees absolutely no hope for his case Remedies are of no avail, and he can only anticipate a horrible end Feelings of unreality and mild hallucinations occasionally occur, particularly in connection with ideas of sin, guilt, and disease Of vital importance are persistent ideas of suicide, and the patient may show remarkable ingenuity

and cunning in evading attendants and putting an end to his suffering The patient in the following case was a man forty-seven years of age

Dr Good morning, Mr H, how are you today?
Pt (Long pause—looks up and then head drops back down and stares at floor)
Dr I said good morning, Mr H Wouldn't you like to tell me how you feel today?
Pt (Pause—looks up again) . . . I feel . terrible . . simply terrible
Dr What seems to be your trouble?
Pt . There's just no way out of it . nothing but blind alleys I have no appetite . nothing matters any more . it's hopeless . . everything is hopeless
Dr. Can you tell me how your trouble started?
Pt I don't know . it seems like I have a lead weight in my stomach . I feel different I am not like other people my health is ruined . I wish I were dead
Dr Your health is ruined?
Pt . . Yes, my brain is being eaten away I shouldn't have done it If I had any will power I would kill myself . . I don't deserve to live . I have ruined everything . and it's all my fault
Dr It's all your fault?
Pt Yes . . . I have been unfaithful to my wife and now I am being punished my health is ruined . there's no use going on (sigh) . . . I have ruined everything my family . . and now myself . I bring misfortune to everyone I am a moral leper . . a serpent in the Garden of Eden why don't I die why don't you give me a pill and end it all before I bring catastrophe on everyone .
Dr Don't you think we can help you?
Pt . . (pause) . . . no one can help me everybody tries to help me . but it is too late . . (long pause, sigh) it's hopeless . . . I know that . . it's hopeless . .

3. *Depressive stupor* In the most severe degree of retardation and depression, the patient becomes almost completely unresponsive and inactive He is usually bedridden and utterly indifferent to all that goes on around him He refuses to speak or eat, and has to be tube fed and have his eliminative processes taken care of Confusion concerning time, place, and person is marked and there are vivid hallucinations and delusions, particularly involving grotesque fantasies about sin, death, and rebirth During this period the patient is invariably constipated, has a foul breath, and suffers impairment in general physical health The following brief symptom description of one patient will serve to illustrate this severe depressive reaction

The patient lay in bed, immobile, with a dull, depressed expression on his face His eyes were sunken and downcast Even when spoken to, he would not raise his eyes to look at the speaker. Usually he did not respond at all to questions, but sometimes, after apparently great effort, he would mumble something about the "Scourge of God" He appeared somewhat emaciated, his breath was foul, and he had to be given enemas to maintain elimination Occasionally, with great effort, he made the sign of the cross with his right hand The overall picture was one of extreme vegetative-like immobility and depression.

With modern therapeutic techniques such as electro-shock, most depressive reactions can be rapidly ameliorated and few hospitalized patients need remain in this condition for an extended period of time

Circular and mixed types Although manic-depressive reactions have been considered historically as circular reactions, only some 15 to 25 per cent of these patients actually show an alternation between manic and depressive reactions Usually such an alternation from a manic to a depressive reaction or vice versa takes place directly, but occasionally there may be a transitional period or a period of normality between the two For example, one patient recovered from a manic reaction and left the hospital only to be readmitted about a year later with a severe depressive reaction.

In mixed reactions there may be various

combinations of manic and depressive symptoms at the same time. For example, there may be a "manic stupor," in which the patient experiences marked feelings of elation, accompanied by a dearth of ideas and generally decreased psychomotor activity There are also patients who manifest a severely depressed mood, with self-accusatory and other morbid ideas, accompanied by marked mental and motor excitement in which the patient may restlessly pace the floor, wring his hands, and bewail his fate. In some instances these patients are classified as a mixed or agitated type This differs from the agitated depressive reaction characteristically found in involutional melancholia (to be discussed in the next section) in that it is not so directly related to the problems and life situations of approaching old age as are involutional reactions. This distinction is well brought out in the following case

The patient, a 24-year-old woman, had eloped two years previously with a young man of whom her parents disapproved Following the elopement the parents disowned her and refused to have anything to do with her The patient and her husband then came to California, where he obtained employment as a shipping clerk in a wholesale company

The daughter and her parents did not correspond although the daughter had severe guilt feelings about letting her parents down—they had had great ambitions for her in college and had looked forward to her future marriage with a wealthy youth whose parents were old friends During her first year in California she became pregnant and just before the baby was to arrive wired her parents of the forthcoming event Unfortunately the baby died during birth and the handsome presents her parents sent for the baby only served to intensify her disappointment However, this did serve to re-establish relations with her parents and they made immediate arrangements to drive to California to visit the patient and her husband. But on the way they were involved in a tragic automobile accident The father was killed outright and the mother died on the way to the hospital.

Upon the receipt of this news the patient became extremely depressed and attempted suicide by taking an overdose of sleeping tablets. Emergency medical attention saved her life but she remained depressed and was extremely anxious and tense, unable to sit still or concentrate on any topic except her parents' death She blamed herself for this and paced the floor in great agitation, muttering to herself and bewailing her guilt During this period the following conversation took place

Dr You feel that you are to blame for your parents' death?

Pt. Yes, oh why didn't I obey them Now they are dead . . . I have killed them They were wonderful to me and I have repaid them by disobedience and murder I deserve to die too. Oh God! I have killed my baby and now my parents! I don't deserve to live . . . I am no good, evil. I will be punished too . . Oh God what have I done!

It was thought in this case that the patient had felt considerable hostility toward her parents following their rejection of her, as well as guilt for disobeying them. She had never been able to express this hostility even to her husband Apparently it added considerably to her guilt feelings and played an important part in the severe guilt reaction and agitated depression which followed their death.

There are also, of course, manic-depressive patients whose symptom picture has a distinct schizophrenic coloring, but the marked distortion of reality common to the schizophrenic is not typically found in manic-depressive reactions

General dynamics. In evaluating the predisposing and precipitating factors in manic-depressive reactions, we shall again find it profitable to consider possible biological, psychological, and sociological levels

1. *Biological factors.* Attempts to explain manic-depressive reactions on a biological

level have run the familiar gamut from hereditary predisposition through constitutional factors to organic pathology

Statistical findings do indicate that the incidence of manic-depressive reactions is considerably higher in the relatives of manic-depressives than in the population at large. For example, Slater[95] found that approximately 15 per cent of the brothers, sisters, parents, and children of manic-depressives were affected as compared with an expectancy of 0.5 per cent for the general population. Rennie and Fowler[88] found a positive heredity in 63 per cent of their series of 208 manic-depressive cases, and conclude "That the hereditary factor is important cannot be questioned."

Although such evidence for a hereditary predisposition to manic-depressive reactions cannot be ignored, it is subject to the same limitations we have mentioned before, since the factor of early environment has been left uncontrolled The significance of heredity in the etiology of manic-depressive reactions is far from clear, and at the present time it is probably most profitable to think of heredity as an important interactional factor which is badly in need of further clarification

Many investigators have held that certain individuals have constitutional tendencies toward extreme emotional mood swings—some in the direction of feelings of well-being and elation, some in the direction of discouragement and depression, and some in both directions who thus may alternate from one to the other When we are subject to indigestion or headaches or other bodily discomforts, many of us tend to feel discouraged and mildly depressed. Is it not possible then that in actual manic-depressive reactions there are subtle bodily changes which lead to a lowering of bodily tone and to the feelings of depression? In reaction to minor stresses or upsets, these feelings are then presumably exaggerated by an emotionally labile person That many patients do evidence exaggerated mood swings to minor upsets cannot be denied, but whether it is due to hereditary predisposition, or to constitutional make-up, or to learned psychological reaction patterns is another question Merely to refer to "vague constitutional factors which predispose the individual to such affective exaggerations" is not particularly helpful.

Kretschmer[58] believed manic-depressives were of the pyknic type—short, stocky, thick-necked, vigorous individuals Sheldon[92], too, considered both his mesomorphic (muscular, solid, athletic, energetic, aggressive) and endomorphic (stout, plump, soft, sentimental, pleasure-seeking, extroverted) types to be prone to the development of manic-depressive reactions when placed under excessive stress. Again, however, the question arises as to whether these constitutional physiques foster the development of certain personality traits, or whether the personality traits foster the development of certain types of physique. It seems most likely that there is an interaction of both sets of factors In any event this problem needs to be clarified before the role of constitutional factors will be clear.

Kraepelin considered the disorder to be toxic in nature, but although many later investigators have followed his lead, no underlying organic pathology has so far been demonstrated. Likewise, despite certain somatic differences between the manic and the depressive reactions, no significant differences in biological functions have been found which are comparable with the gross behavioral differences The manic-depressive reactions have numerous actual effects on the body, such as insomnia, loss of weight, loss of appetite, constipation, fatigue, cardiovascular irregularities, gastrointestinal upsets, sexual impotence, and unexplained fever (Rennie and Fowler[88]). Thus, although the most common cause of death in manic-depressive patients is disease of the cardiovascular renal system (in contrast to schizophrenia, where the most common cause of death is tuberculosis) (Kraines[57]), we may conclude that this, too, is probably an interactional rather than a major causative factor.

Encephalographic findings show no clear-cut differences between the brain waves of manic-depressives and normals, and there seem to be no significant changes in brain waves after recovery (Davis[20]) although findings here are contradictory (See page 487)

2. *Psychological factors*. Recently, increasing emphasis has been placed on psychological factors, and it is felt that manic-depressive reactions, like schizophrenia and paranoia, can best be explained in terms of the reaction of certain personality types to acute stress

As yet we lack clear-cut studies showing which particular types of parent-child relations are most apt to lead to a personality which will be predisposed to manic-depressive reactions. However, it is common to find excessively high moral goals and severe discipline in the childhood background of depressives. Also, one would expect parental example in exaggerated emotional mood swings to foster a similar emotional development in the child

Whatever their childhood background, available evidence indicates that manic patients, prior to their illness, have been ambitious, outgoing, energetic, sociable, often highly successful individuals The depressive is also aggressive, extroverted, and friendly, but more obsessive, anxious, and self-depreciating, with an unusually rigid conscience development which prevents the overt expression of hostile impulses (Oltman and Friedman[78], Rennie and Fowler[88]). Manic-depressive reactions are by no means confined to these personality types, however Rennie and Fowler, for example, found that introverted personalities were relatively common (46 cases out of 208) Also, schizoid and other personality trends color the pre-psychotic personality picture in some manic-depressive reactions.

In the process of working with and studying manic-depressive patients, one is often impressed by the high incidence of stressful life situations which apparently operated as precipitating causes in the onset of the illness Rennie and Fowler[88] found that 79 per cent of their patients showed definite disturbing life situations which were dynamically related to the onset of the illness Only 20 per cent of the cases seemed to have arisen relatively out of the blue Consequently, they conclude that the manic-depressive reaction is to a large extent a life-experience-determined reaction and not some mysterious, constitutional, unmotivated reaction pattern

In understanding manic-depressive reactions to stress, it is helpful to remember that we all experience moods We may feel particularly elated and self-confident at one time and vaguely anxious and depressed at another In a study of euphoric and depressed moods in normal subjects, Johnson[43] found striking differences in their whole manner and approach to problems depending on whether they were in a euphoric mood or a depressed one She found that in euphoric moods her subjects made more spontaneous and unnecessary conversation and found it much easier to make decisions In addition, they made more expansive movements in such psychomotor functions as writing

Depression, on the other hand, resulted in a very definite regression to childhood events in thought and memory, increased difficulty in making decisions, more cramped and smaller script and figures, and a judgment of distances as being greater than they actually were. Findings such as these in normal subjects are of value in understanding the more exaggerated moods and general clinical picture in manic-depressive reactions

a) *Manic patterns*. Instead of turning inward to a private fantasy world like the schizophrenics, the manic tries to escape his difficulties by a "flight into reality." Stern[96] refers to this as a "crowding out" process in which unpleasant thoughts are kept out of consciousness by occupying the mind with other matters In less severe form this type of reaction to stress is evidenced by the person who goes on a round of parties to try and forget a broken love affair, or tries to escape from inner anxieties by restless activity

in which he occupies every moment with work, theaters, athletics, sex affairs, travel, and countless other crowded activities—all performed with professed gusto but actually with little true enjoyment (Masserman[66]).

In true manic reactions the dynamics are similar but the pattern is exaggerated. The manic patient, with a tremendous expenditure of effort and energy, overrides his feelings of anxiety and inadequacy. It is almost as if he were running away from his own specific problems and giving vent to his pent-up feelings of frustration and hostility by attacking the whole world. He becomes elated, and feels supremely self-confident and capable. He is stronger than any problem and the whole world is his. In this attack on the world the patient's orientation to reality is radically modified and inhibitions are discarded. As Meyer[72] has pointed out, manic reactions seem to represent the bursting forth of pent-up emotions as a result of stress situations that have become unendurable.

Once this mode of coping with difficulties is adopted, it is maintained until it has spent itself in emotional exhaustion and desensitization, for the only other alternative is an admission of defeat and being brought face to face with the original problems once more. This is well brought out in the following case of a hypomanic patient.

"He dressed in flashy pajamas and loud bathrobes, and was otherwise immodest and careless about his personal appearance. He neglected his meals and rest hours, and was highly irregular, impulsive and distractible in his adaptations to ward routine. Without apparent intent to be annoying or disturbing he sang, whistled, told pointless off-color stories, visited indiscriminately and flirted crudely with the nurses and female patients. Superficially he appeared to be in high spirits, and yet one day when he was being gently chided over some particularly irresponsible act he suddenly slumped in a chair, covered his face with his hands, began sobbing, and cried, 'For Pete's sake, doc, let me be. Can't you see that I've just got to act happy?' This reversal of mood was transient and his seeming buoyancy returned in a few moments, nevertheless during a sodium amytal interview his defense euphoria again dropped away and he burst into frank sobbing as he clung to the physician's arm. He then confided that during the preceding year he had begun to suspect, with some reason, that his young second wife whom he 'loved to distraction' had tired of their marriage and had been unfaithful to him. He had accused her of this, but she had replied, almost indifferently, with an offer of divorce. His pride had been greatly wounded. . ." (Masserman[66], p. 60)

b) *Depressive patterns.* Here, too, we find a stress situation which is too much for the patient, though he reacts differently from the manic because of his somewhat different personality organization. Instead of fighting, the depressive tends to blame himself for his difficulties and to feel that he is hopelessly inadequate and worthless. Apparently his rigid conscience is turned inward in an intropunitive reaction to his life difficulties, and the hostility aroused by his frustrations and failures is turned inward toward the self rather than being directed toward the outside world, as in paranoid reactions.

"If such a person meets a situation representing to him an overwhelming loss or frustration, he is stymied, he is held up. Loss and frustration may be answered with the withdrawal of interest in the outside world and its objects so that such a person now pulls his tentacles in, severs himself from the outside, abandons the emotional investments and charges he has built up, becomes overwhelmed by the magnitude of the task or his failure and develops feelings of regret, feelings of disappointment, feelings of threat, feelings of catastrophe. As a result of the blockage and frustration of the drive in its outward push it will be withdrawn into the person and used to inhibit and to put the brake on any attempt of libidinous outreaching. Eventually it may be used for aggression against the self. . . ." (Weisz[104], pp. 214-215)

The depressive apparently gains some relief from his intolerable situation by admitting defeat and giving up the fight Now he has put a brake on his aspirations and drives which enables him to achieve an emotional insulation to the external world. However, the individual's feelings of relief and insulation are gained at the expense of self-esteem, adequacy, and independence and thus are accompanied by marked guilt and self-accusation As a result, the energies which have been withdrawn from the external world may be used to reinforce internal symbolic processes of a self-devaluative nature and in severe cases may eventuate in extreme suffering or even attempts at suicide.

As in manic reactions the depressive symptoms may have rather symbolic adaptive value. For example, Masserman[66] considers the patient's "giving up" and his subsequent passivity and dependency as representing a regression to an infantile emotional orientation. Similarly, the patient's hypochondriacal notions may represent a thinly veiled reversion to narcissistic concern with his own body, and he may derive considerable secondary satisfaction from his self-centering of attention and interest Even the patient's exaggerated self-accusations such as "I am the greatest sinner that ever lived and the whole world knows it," may not only express the patient's ideas of extreme guilt and unworthiness, but at the same time help to build up his feelings of self-esteem and importance

Oltman and Friedman[78] have emphasized the manic-depressive's frequent hostility toward his former love objects One manic patient insisted that he had found the secret of pure love and truth in some magic tablets that he had compounded, and vehemently insisted that he loved everyone including his wife However, he later forced her to take some of his tablets, which he told her were poison, afterwards he admitted thinking they "would make the hateful old hag into a sweet young woman" Typically in manic reactions, the hostility is open and direct, whereas in the depressive it finds only a disguised or projected expression and is accompanied by severe self-accusation and self-devaluation

This intropunitive pattern is frequently implemented by the tendency in our culture to consider failure as generally due to the individual's own shortcomings Thus the depressive goes over his past with a microscope, picking out any possible sins of omission or commission and exaggerating their importance in relation to his present difficulties Immoral sexual behavior, failure to observe religious convictions strictly, and any other unethical actions become quite naturally the focus of attention.

Even suppressed unethical impulses and desires may be elaborated upon as if they had actually been carried out in action Thus the patient may accuse himself of selfishness or unfaithfulness or hostile acts against loved ones which did not actually occur. The self-accusations seem to be in the nature of attempts at expiation and atonement Where the patient fears that active hostility would lead to disapproval and abandonment by the person on whom he feels completely dependent, his abasement and self-condemnation may be designed to expiate his hostility and obtain the forgiveness and approval of the indispensable person.

This mechanism may explain the otherwise mysterious phenomenon of spontaneous remission in depressive cases Apparently there is a gradual working through of the individual's feeling of defeat and unworthiness, in which, by self-punishment, he pays the price for his failures and is then cleansed and ready to attempt another assault on his life situation In fact, one major theory of the efficacy of shock therapy for depressive reactions is that it is interpreted as punishment by the patient so that he feels he is thereby cleansed of his sins

c) *Patterns in mixed reactions* In mixed-reaction types the dynamics are similar, although in agitated depressions there is usually

an intensification of feelings of guilt and hostility toward the frustrating world. Even exaggerated self-condemnation does not defend the patient completely from his extreme guilt and resentment. As a result, the individual is restless, excited, apprehensive, fearful, unable to relax, and often complains of inexplicable feelings of hostility and violence. Suicide, as the only solution to such a life predicament, is of course always a serious danger.

3. *Sociological factors.* In terms of educational, occupational, and socio-economic level, manic-depressives tend to be distributed rather evenly throughout the general population (Myerson and Boyle[77], Tietze *et al.*[101]). This is, of course, in contrast to schizophrenics, who tend to come from lower socio-economic levels.

At first glance this would seem to favor a hereditary predisposition to manic-depressive reactions which is later manifested in manic-depressive reactions in relation to life stresses regardless of the individual's education and training. However, it is equally possible that there are selective factors operating here. Manic-depressives, by virtue of the non-chronic nature of their reactions, are usually able to maintain their positions in the community. Thus their families are not subjected to the economic deprivations so often found in the families of the schizophrenics, since the latter are unable to make an adequate social adjustment. Since both schizophrenic and manic-depressive reactions tend to run in families, it might thus appear that "manic-depressive families" would maintain their position in the community, whatever it might be, whereas "schizophrenic families" would be forced to lower socio-economic levels.

In connection with socio-cultural factors, Beaglehole[4] found manic-depressive reactions in New Zealand to be much more common than schizophrenic reactions in the ratio of about 2½ to 1, which is an almost exact reversal of their incidence in the United States. Among Kenya Africans, however, Carothers[18] found that 28.6 per cent of the total admissions were classified as schizophrenia, whereas manic-depressive reactions accounted for only 3.8 per cent of the total admissions. This discrepancy Carothers attributed to the interesting fact that among the Kenyans only the manic end of the scale was represented—not a single case of depression was observed in 120 consecutive manic-depressive admissions. The precise role of socio-cultural and other factors in such incidence differences from one group to another remains to be clarified.

Therapy. In manic reactions one of the immediate aims of therapy is to reduce the patient's overactivity. This may be achieved in part by the skillful handling of the patient and the direction of his activity into constructive channels. For example, the hypomanic may be encouraged to record his memoirs or to write his autobiography. Where the patient is not too excited, psychotherapy and recreational and occupational therapy are of great value. In more serious cases electro-shock and prolonged narcosis, metrazol convulsive hydrotherapy, and physiotherapy may be used to quiet the manic patient. However, the patient's freedom from excitement is usually short-lived, and these forms of treatment do not necessarily shorten the length of the entire manic cycle.

In the treatment of depressed cases, electro-shock therapy has proved to be of almost miraculous value. After a series of electro-shock treatments the great majority of morbidly depressed patients once again become animated and relatively normal and approachable. At this point psychotherapy becomes of vital importance in helping the patient to stabilize his improvement and in bringing about a more satisfactory long-range personality readjustment.

In both manic and depressed cases, proper nursing and general medical care are a vital aspect of treatment. Many manic patients exhaust themselves from overactivity, and many depressed patients refuse to eat and are serious suicidal risks. These patients are frequently very ingenious in their efforts to put

an end to their suffering, despite the patient's assurances that he will not harm himself, he may cut his wrists with a small fragment of glass, or hang himself with a blanket, or set fire to his clothing with a concealed match. It should be emphasized that because of the continual danger of suicide, family members should not attempt to treat depressed patients in the home, but should see that they are hospitalized as soon as possible.

Prognosis. As we have noted, manic-depressive reactions tend to recur and only about 1 patient out of 5 remains free from subsequent attacks (Rennie and Fowler[88]). Even so, the general prognosis in manic-depressive reactions is good. In the absence of any special form of treatment, approximately 70 per cent of hospitalized cases recover within one year of first admission. With modern methods of treatment, the recovery expectancy is above 90 per cent.

The prognosis in a given case, however, depends on several factors. The most favorable prognosis is for individuals having their first attack between 21 and 30. Patients having their first attack after 40 show a lower recovery rate. The prognosis for those patients having a typical outgoing manic-depressive-type personality is more favorable than for those showing schizoid or any other personality coloring (Stern[90]). Interestingly enough, Rennie and Fowler[88] found that the fact of hereditary "tainting" is not an outstanding factor in retarding or preventing recovery.

INVOLUTIONAL MELANCHOLIA

This is a depressive reaction which is very similar to what we have called "agitated depression" or the "mixed type" of manic-depression reaction. However, it is differentiated from other depressive reactions by its initial occurrence in later life, during the general involutional period of bodily and intellectual decline, by its tendency to long duration, and by the failure of these patients to show spontaneous recovery. This involutional period is usually considered to be from 40 to 55 years in women and from 50 to 65 in men. Involutional patients constitute about 4 per cent of all first admissions to mental hospitals. The average age at first admission is 55 for men and 52 for women. Involutional reactions occur about three times as frequently among women as among men.

Symptoms. Preliminary symptoms of this illness usually involve excessive worry about minor matters, restlessness, insomnia, and unprovoked spells of weeping. The patient is worried about the past and sees no hope for the future. As the more acute symptoms make their appearance, he becomes increasingly depressed and apprehensive and develops marked feelings of worthlessness and self-condemnation. Often he is preoccupied with some real or imagined misdemeanor committed in the past for which he feels that he can never be forgiven and is eternally damned. He is in utmost despair and feels that there is absolutely no hope. He has committed the unpardonable sin.

Despairing, self-accusatory statements such as "Oh God, why did I do it," are common, and the patient may fear that he is doomed to die in penniless squalor and poverty, or even that he will be jailed, tortured, and put to death for his terrible sins.

These anxious and misery-laden feelings are usually accompanied by an increase in motor activity, which may range from mere restlessness to extreme agitation in which the patient may pace the floor, weeping, wringing his hands, pulling his hair, biting his lips, and bemoaning his fate. Suicidal impulses are frequent, and the danger of actual suicide is very great.

Hypochondriacal delusions are common and the patient may insist that his bowels are stopped up and will never move again, that his stomach is rotting away, that his body is all withered and dried up, that his brain has been eaten away, or that he has cancer or some other terrible disease. He may steadily refuse to eat, claiming that he has no stomach, or that he doesn't deserve food and starving

to death is part of his punishment, or that the food has been poisoned. Feelings of unreality and nihilistic delusions frequently develop, and the patient may feel that he is living in a shadow world and that nothing really exists Such ideas typically center around things that no longer interest him, such as home, wife, and children

Despite the patient's general depressed and anxious state, thought processes are not retarded, orientation is usually fairly good, and the patient may realize that he is ill and needs help However, the danger of suicide remains great even in the patients who show considerable insight into their condition and plead for help.

Involutional reactions are of two main types, those characterized chiefly by depression, and those centering around paranoid ideas. The depressed form, usually with accompanying agitation, is the most common The paranoid form is characterized by delusions of reference and persecution

Following are two illustrations which will serve to bring out the feeling tone and the thought content typically found in involutional depressions The first case is relatively mild and shows the incipient stage of developing involutional reaction Here the decompensation has only progressed to a neurotic level, but the tenor of the interview reveals the trend toward a more severe involutional reaction. The patient's life situation was in actuality highly favorable and he had had no environmental setbacks. His difficulties were apparently due to unrealistically high goals and feelings of failure The patient was a man of 53.

Dr Good morning, how are you today, Mr. ——?

Pt Oh, I don't feel so hot. Everything seems to be piling up on me

Dr Do you have anything particular in mind?

Pt Well, the little details of living seem too much I was a Phi Beta Kappa in college but I haven't lived up to it. I haven't made the proper use of my opportunities I live in constant fear of failure . you might say I have a very low opinion of myself. I have a terrible dread of old age, insecurity fear, poverty, and old age

Dr Can you explain why you fear these things so much?

Pt I was selfish with my mother and then with my wife It all goes back to immaturity . I have always been immature I seem to want to escape responsibility . . to have a will to failure. I haven't met life very well . . I am the head of several organizations but not a part of them it doesn't mean anything to me I have created a purgatory for myself to live in I can't sleep at night only one hour last night I have a very low evaluation of myself and I think justly so I am 53 and there's not much to point to with pride I am not a good businessman . in fact, I am not very good at anything I don't even know as much as I should to stay in my own business

Dr. Are you actually in any financial difficulties?

Pt No My parents left me an inheritance besides my business I know my difficulties aren't realistic, but when my business falls off a little, I become panic-stricken I am not a good businessman I have already lost quite a bit of money through poor investments My trouble is that I have never learned to stand on my own two feet I live in continual fear of failure and disgrace

Dr Do you feel that you are getting better?

Pt. I'm getting worse, doctor I have night sweats and can't sleep and this continual tension My stomach muscles just jump I don't seem to have much courage to face things Not a good businessman . . my efforts to success stink I would like to be happy sometime before I die . but I'm not good enough. You see, doctor, I have wasted my opportunities, and now everything is beginning to catch up with me. I haven't progressed as I should, and now I am in "over my head." I want to get better, doctor, but there isn't much hope Life has become a squirrel cage I can't go on

The second case, of a woman of 47, is much more severe

Dr. Hello—how do you feel today?
Pt Oh (moaning), why don't you just let me die, it would be better for everybody.
Dr. What is the matter?
Pt Misery and death follow me around, everyone who gets close to me suffers My mother and father, my children, and my husband suffered by my hand and died by my hand (Gets up and paces back and forth)
Dr Isn't the girl that visits you your daughter?
Pt She says she is my daughter, but my children are all dead—and it is my fault I should die a horrible death God knows this and wants me to die Why did I do it, there's nothing left for me but death. Nothing can be done for me—it's unforgivable, you should kill me (Runs hands nervously through hair)
Dr What did you do?
Pt. I let them die and now I should die I am only dirt, there is only dirt left in me There is no reason for me to eat because I am only dirt—filthy, smelly dirt I treated everyone like dirt and now I am dirt—the worst sort and everyone knows it
Dr Don't the people treat you well here?
Pt They don't try to hurt me—but they will suffer like all the rest if they try to help me They wouldn't try anyway—because they can see I am dirt turning to dirt I am worthless and I can't do anything about it, no one can be my friend They try to feed me Can't they see that they can't feed dirt—earth into earth, that's the only place for me, and maybe I can atone for the evil I have caused

A good description of the symptoms typically found in the paranoid form of involutional reactions is given in the following case history

"H S, a schoolteacher aged 43 years, was admitted because she accused the neighbors of poisoning her with noxious gases and because she believed her husband was intimate with a 15-year-old girl in the neighborhood

". When she was admitted, she appeared somewhat haughty and indignant and refused to answer any question referring to her personal affairs She appeared well oriented and her memory for general events was good. She insisted that she was well and advised the ward physician to consult her neighbors and her husband if he desired information From the husband it was learned that she had been delusional for several years, she had never displayed any normal sex desire, she was very jealous of his sister, and upbraided him whenever he conversed casually with anyone of the opposite sex For the past six months she had been accusing him of 'carrying on' with a 15-year-old girl who clerked in a confectionery store at the neighboring corner, where he was accustomed to buy tobacco She claimed she sensed the odor of the young girl's perfumery on his person. Lately she had detected other strange odors in the house and concluded that the neighbors had been 'valving poison gas' through her basement windows. She neglected her housework, refused to touch her husband's linen, and washed only her own She had been reading several books on 'spiritualism'

"On the wards she was cleanly, fairly cooperative, but definitely tight-lipped and seclusive. Several times she complained to the head nurse that the food tasted bad, and she refused her meals for several days at a time She accused a pupil nurse of 'making eyes' at her husband when he was being escorted from the ward She frequently demanded her release, but rarely pressed the matter with any argument Her condition remained unimproved for many months . ." (Karnosh and Zucker[51], pp 95-97)

General dynamics. Involutional melancholia is one of the disorders in which the etiology is best understood.

1. *Biological factors* Many women at about the beginning of the involutional period experience various disturbances referred to as the menopause syndrome The symptoms consist primarily of hot flushes, headaches, periods of dizziness, excessive sweating, nervous irritability, insomnia, and difficulty in concentrat-

ing. Although these disturbances may be associated with a mild depression, the general picture is usually only mildly neurotic in nature and is a transient disturbance, ordinarily passing away with no serious aftereffects It is apparently due to a decrease in ovarian hormone production, and treatment with ovarian hormone extracts is helpful

Although the menopause syndrome and involutional melancholia may occasionally occur at the same time and the symptoms may be somewhat fused, the two conditions are distinct involutional reactions are much more serious in nature and do not respond to estrin treatment Endocrine changes may play an interactive and aggravating role in involutional reactions, but they are not the primary causative factor (Weiner[105]) In fact, biological factors in general—hereditary predisposition, constitutional make-up, and organic pathology—have received little emphasis in involutional reactions

2. *Psychological factors* The primary emphasis in involutional reactions has been placed upon the reactions of a psychologically predisposed individual to the severe stresses characteristic of the involutional life period

Although the precise nature of the parent-child relations in involutional reactions is not clear, these patients frequently reveal a background of overconscientiousness, overmeticulousness, narrow social interests, rigidity in everyday living habits, insecurity, and perfectionism (Eyman[28], Haggerty[36], Palmer[80], Strecker[97]) Paranoid-type patients have usually also been suspicious individuals who have always felt that everyone is out to take advantage of them Women who have shown excessive jealousy, suspiciousness, and sexual frigidity are thought to be particularly prone to such upsets during the involutional period.

Many investigators, however, pay little heed to the frequency of these pre-psychotic personality factors, pointing out that many patients have been perfectly normal prior to the onset of the acute symptoms In these cases, however, there is reason to believe that the picture of normality was somewhat on the surface—many individuals are adept at concealing their actual feelings and present to others a false picture of self-confidence

An understanding of the stresses characteristic of the involutional period of life is of great importance in understanding the psychodynamics of involutional reactions The involutional period marks the beginning of the period of general bodily and intellectual decline, inevitably ending in senility and death The individual finds himself unable to handle the work he used to handle, he tires easily, and sexual desire and power are materially lessened The woman realizes that she can no longer bear children and that her beauty and physical attractions have greatly declined It is the period of the loss and illness of loved ones, when the patient too may have various physical ills such as prostate trouble or even seemingly minor complications such as adjusting to false teeth During this period, many individuals realize for the first time that their life is almost over, that they will never have it to live again, and that they are committed to whatever success they have achieved and to whatever way of life they have adopted It is now too late to begin over, and the great dreams of romantic love, wealth, success, and security are finally and irrevocably shattered.

This mood is perhaps well caught in a patient's poem*

"My kin all dead, my childless home a hall
Of spells and spectres deforming the windowed sun,
Friends few or far, and passing one by one,
My body yoked here like an ox in stall
By long disease "

Each individual reacts to these stresses in his own way, depending upon his general personality organization and on the degree of success and independence he has achieved, his

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Summary Chart of Functional Psychoses

PSYCHOTIC DISORDER	GENERAL SYMPTOMS	PSYCHODYNAMICS (TENTATIVE)
Schizophrenic Disorders:		
Latent reaction	Queer, eccentric with minor schizophrenic ideation and behavior (e g , mannerisms, seclusiveness, unpredictability)	Borderline psychotics who manage to attain marginal adjustment by mild use of schizophrenic defenses
Simple reaction	Reduction of external interests and attachments and impoverishment of human relationships Usually apathy and indifference but not usually conspicuous delusions or hallucinations	Simple retreat from anxiety-arousing stress to lower level of psychobiological functioning involving emotional indifference and lowered aspiration
Hebephrenic reaction	Shallow, inappropriate emotional responses, silliness, mannerisms, bizarre delusions, stereotypies, unpredictable hollow giggling	Severe personality decompensation with fragmentation of thought processes, loss of faith in self and world, withdrawal from social contacts, and surrender to disintegration
Catatonic reaction	Conspicuous motor behavior, with either generalized inhibition (stupor, mutism, negativism, waxy flexibility) or hyperactivity	Individual momentarily overwhelmed by problems but struggling desperately to find some system of beliefs, some faith on which he can build
Paranoid reaction	Delusions of persecution and/or grandeur, hallucinations, usually with constant attitude of suspiciousness and hostility Sometimes expansive delusional system predominates, with delusions of omnipotence, remarkable talents, and high social status	An attempt to maintain ego integrity by projecting blame for difficulties onto "enemies" and/or by compensating grandiose delusions However, individual so overwhelmed by reality that delusions not well systematized and personality disorganization severe
Unclassified	Combination of above	Combination of above

Paranoid Disorders:

Paranoia	Systematized delusions of persecution and/or grandeur with rest of the personality remaining relatively intact. Rigid, logic-proof, self-important, suspicious personality	Defense against feelings of failure* and resulting self-devaluation by projecting the blame on others who become "persecutors", interpreting imagined attention as proof of own importance
Paranoid state	Delusions of persecution and/or grandeur—not as well systematized as in paranoia but without bizarre fragmentation and deterioration of the paranoid schizophrenic. Hallucinations common	Similar to above but less systematized and usually precipitated in predisposed individual by particular anxiety-arousing stress situation. Usually transient, with spontaneous recovery

Affective Disorders

Manic-depressive reaction	Exaggerated mood swings with elation and overactivity or depression and underactivity or a combination or alternation of these. Bizarre, poorly systematized delusions and hallucinations	Attempts to cope with anxiety-arousing feelings of failure by a "flight into reality" or by intropunitiveness with self-recrimination and self-punishment to "undo" or "pay price" for failure
Involutional melancholia	Depression usually with agitation, in absence of history of manic-depressive reaction. Two main types: those characterized chiefly by depression, with predominant mood of hopelessness and self-recrimination, and those centering around paranoid ideas, with delusions of guilt and worthlessness	Overreaction to feelings of failure to achieve goals and approaching old age with no hope of future attainment. Allays anxiety in part by self-punitiveness but anxiety-arousing stress remains too great, leading to severe personality disorganization without spontaneous recovery

* "Failure" here refers to inability to live up to level of aspiration not only occupationally but in terms of ethical principles, internal desires, etc.

family attachments, and so on Some people accept the inevitable with philosophical calm, perhaps tinged with a little sadness, and grow old gracefully, others begin the downward path as they climbed up, without much thought or awareness. Others, however, find this a most trying and difficult period Even where the individual has been relatively well adjusted up to this point, a mild involutional reaction may be precipitated by the sudden realization that his life is about over, and that he has failed to achieve his goals or gain the many values in life that he holds indispensable This is particularly true if such general disappointment and frustration are accompanied by other common precipitating factors such as financial losses, the death of a loved one on whom the patient feels dependent, business worries, or worry about health

The dynamic patterns involved in both the depressed and the paranoid forms of involutional reactions are readily understandable and might almost be predicted In response to the very real stresses at this time of life lonely, overconscientious, perfectionistic individuals easily become worried, anxious, and depressed. As past failures and disappointments loom large and as the future holds potentially less and less, the increased self-centering of interests and hypochondriacal concern provide a measure of substitute satisfaction. Then, as the involutional reaction becomes exaggerated, these hypochondriacal factors develop into definite delusions *

Ideas of unreality probably develop out of this same self-centering of interests and the accompanying loss of interest in others and in the environment. It has been pointed out that to a large extent things feel real to us in proportion to the amount of interest we take in them; and as we gradually become preoccupied with our own thoughts and difficulties, the external world becomes progressively less real and begins to take on a somewhat shadowy aspect.

The patient's ideas of poverty are related to the general involutional picture in much the same way As he feels more and more that he has failed to provide adequately for his security and prestige in later years, he becomes increasingly concerned with their importance As he looks toward his bleak, dismal future, it is not surprising that part of the picture takes on the aspect of dire poverty and want, representing all that such a loss would mean to such a person in his old age—loneliness, lack of attention and respect, and, perhaps most vital of all, insecurity

Delusions of sin grow naturally out of the individual's feelings of failure and self-recrimination. He begins to feel that he must not have deserved to succeed (for it is common in our culture to assume that a really good and deserving person who works hard is bound to be a success) It is then only another step to magnify the most trivial matters as cardinal and unpardonable sins and to distort them as a means of explaining his present predicament And since he feels that he is being punished for these unpardonable sins, the future is hopeless and he looks forward only to imprisonment, torture, death, and eternal damnation Small wonder that these patients need supervision to prevent suicide

As with other depressives, the involutional patient probably gets some small satisfaction out of having committed the greatest sin, or at least some unpardonable sin For this, at least, sets him off in a unique category. Also the excessive self-recrimination insures some measure of expiation and atonement

In paranoid forms the individual reacts to his disappointments and feelings of failure during the involutional period by projecting onto others all the blame for his difficulties He has failed to achieve his ambitions only because others are working against him, since his enemies have gone to all this trouble to prevent his being a success, and are obviously entirely ruthless, it is small wonder if he

* In the following chapter we shall take up in considerable detail the old-age psychoses, in which there are organic stresses in the form of brain degeneration, as well as the stresses arising out of the older person's life situation and personality

suspects his food has been poisoned or that there is poison gas in his room

As we have seen, the manic-depressive is apparently only temporarily defeated. once he has worked through the resulting self-condemnation and self-devaluation, he can return to the struggle of life. On the other hand, the involutional patient, more rigid and perfectionistic, older, and facing what he evaluates as a hopeless future with no more opportunities left, has little incentive to get well

It is not necessary to elaborate the dynamics in the paranoid type of involutional reaction since they are essentially the same as those in paranoid states, and there is some question whether the paranoid reaction-type should be included under the heading of affective disorders at all.

3. *Sociological factors* Differences both in the incidence and in the symptom content of involutional reactions have been found between different societies Carothers[18], for example, found an absence of guilt in involutional reactions among Kenya Colony Africans as contrasted with our culture, in which guilt is usually very strong. In addition, he found involutional reactions to constitute only 1 4 per cent of total admissions as contrasted with some 4 per cent in the United States Findings such as these indicate the importance of sociocultural factors in the total picture, although their exact role is not yet understood.

Therapy and prognosis. Unlike certain other depressive reactions, involutional depressions are usually of long duration, and these patients do not spontaneously recover without treatment However, electro-shock therapy has proved to be highly effective in involutional depressions, particularly in cases where the pre-psychotic personality was not too badly warped and where the duration of the illness has not been longer than two or three years Psychotherapy with these patients is directed toward helping the patient gain insight into his condition and building up his feelings of self-confidence and adequacy And this therapy can be of great value, especially following electro-shock therapy Some writers report that as high as 90 per cent of involutional patients recover or show marked improvement in from four to six weeks as a result of a combination of electro-shock and psychotherapy (Bennet and Wilbur[6], Haynes and Jacobs[37], Prados and Ruddick[85]).

Psychosurgery has also yielded encouraging results, particularly in long-standing chronic cases where shock treatment has been of little or no value However, the prognosis is much less favorable in the paranoid type or in cases with schizophrenic coloring, and most of these latter patients show a gradual intellectual disorganization or psychological deterioration, not unlike that in schizophrenia

Other aspects of treatment in involutional psychoses are similar to those that have been discussed in connection with manic-depressive reactions Extremely agitated patients may require sedation and hydrotherapy in the form of hot baths. Occupational therapy and other specific therapeutic techniques are often of great value in involutional cases.

REFERENCES

The reference list includes not only the sources from which the author has drawn material, but acknowledgments of the permissions granted by authors and publishers to quote directly from their works

1 Allen, Edward B "Psychiatric Disorders in Forty Male Teachers" *Journal of Nervous and Mental Disease*, XCV(1942), 204-205

2 Arieti, Silvano "Primitive Habits in the Preterminal Stage of Schizophrenia, With Particular Reference to the Hoarding and Self-Decorating Habits" *Journal of Nervous and Mental Disease*, CII(1945), 367-375

3 Barahal, Hyman S "Is Dementia Praecox Hereditary?" *Psychiatric Quarterly*, XIX(1945), 478-502

4 Beaglehole, E "Culture and Psychosis in New Zealand" *Journal of Polynesian Sociology*, XLVIII(1939), 144-155

5 Bellak, Leopold "The Concept of Projection" *Psychiatry*, VII(1944), 353-370

6 Bennet, A. E and Wilbur, C B "Convulsive Shock Therapy in Involutional States after Complete Failure with Previous Estrogenic Treatment" *American Journal of Medical Sciences*, CCVIII(1944), 170-176

7 Bleuler, Eugen *The Theory of Schizophrenic Negativism* (trans by William A White) Washington, D C Nervous and Mental Disease Publishing Co

8 Boas, Franz *The Mind of Primitive Man* (rev ed) New York Macmillan, 1938

9 Boisen, A T *Exploration of the Inner World* Chicago Willett Clark, 1937

10 Boisen, A. T "Onset in Acute Schizophrenia" *Psychiatry*, X(1947), 159-166

11 Boisen, A T "The Form and Content of Schizophrenic Thinking" *Psychiatry*, V(1942), 23-33

12 Born, Wolfgang "Artistic Behavior of the Mentally Deranged," and "Great Artists Who Suffered from Mental Disorders" *Ciba Symposia*, VII(1946), 207-216, 225-232

13 Bradley, Charles and Bowen, Margaret "Behavior Characteristics of Schizophrenic Children" *Psychiatric Quarterly*, XV(1941), 296-315

14 Brickner, R M "Treatment of Aggression The Paranoid" *American Journal of Ortho-Psychiatry*, XIII (1943), 400-410

15 Brown, Junius F *Psychodynamics of Abnormal Behavior* New York McGraw-Hill, 1940.

16 Cameron, Norman "Deterioration and Regression in Schizophrenic Thinking" *Journal of Abnormal and Social Psychology*, XXXIV (1939), 265-270

17 Campbell, C M "Clinical Studies in Schizophrenia" *American Journal of Psychiatry*, XCIX(1943), 475-483

18 Carothers, J C "A Study of Mental Derangement in Africans, and an Attempt to Explain its Peculiarities, More Especially in Relation to the African Attitude to Life" *Journal of Mental Science*, XCIII(1947), 548-597 Reprinted by permission of Dr G W T H Fleming, Editor-in-Chief

19 Christian, H A *Psychiatry for Practitioners* New York Oxford University, 1936

20 Davis, P A "Electroencephalograms of Manic-Depressive Patients" *American Journal of Psychiatry*, XCVIII(1941), 430-433

21 Demerath, N J "Schizophrenia Among Primitives" *American Journal of Psychiatry*, XCVIII (1942), 703-707

22 Despert, J Louise "A Comparative Study in Thinking in Schizophrenic Children and in Children of Pre-School Age" *American Journal of Psychiatry*, XCVII(1940-1941), 189-213

23 Dhunjiboy, Jal "A Brief Résumé of the Types of Insanity Commonly Met With in India" *Journal of Mental Science*, XVI(1930), 254-264

24 Dunham, H Warren "The Social Personality of the Catatonic-Schizophrene" *American Journal of Sociology*, XLIX(1944), 508-518

25 Duval, Addison M and Hoffman, Jay L "Dementia Praecox in Military Life as Compared with Dementia Praecox in Civil Life" *War Medicine*, I(1941), 854-862

26 Elliot, Helen E "Comparison of Non-Psychotic Women with Schizophrenics, with Respect to Body Type, Signs of Autonomic Imbalance and Menstrual History" *Psychiatric Quarterly*, XV(1941), 17-22

27 Escalona, Sibylle "Some Considerations Regarding Psychotherapy with Psychotic Children" *Bulletin of the Menninger Clinic*, 12, No 4(1948), 127-134 Reprinted by permission of the author and the *Bulletin of the Menninger Clinic*

28 Eyman, E V *et al* "A Statistical Survey of the Biogenesis of Involutional Melancholia" *Diseases of the Nervous System*, III(1942), 16-20

29 Faris, Robert E L "Reflections of Social Disorganization in the Behavior of a Schizophrenic Patient" *American Journal of Sociology*, L(1944), 134-141

30. Faris, Robert E L and Dunham, W *Mental Disorders in Urban Areas* Chicago University of Chicago, 1939
31 Fuson, W M "Occupations of Functional Psychotics" *American Journal of Sociology*, XLVIII(1943), 612-613
32 Goldstein, Kurt "The Significance of Psychological Research in Schizophrenia" *Journal of Nervous and Mental Disease*, XCVII(1943), 261-279
33 Good, H S "Fifteen Days Adrift on a Raft, A Clinical Evaluation of Five Survivors" *Naval Medical Bulletin*, XLI(1943), 367-373
34 Gottlieb, Bernhardt S "Prognostic Criteria in Hebephrenia, The Importance of Age, Sex, Constitution and Marital Status" *American Journal of Psychiatry*, XCVII(1940), 332-341
35 Gralnick, Alexander "Folie a Deux—The Psychosis of Association, A Review of 103 Cases and the Entire English Literature, with Case Presentations" *Psychiatric Quarterly*, XVI (1942), 230-263
36 Haggerty, H "Pre-Psychotic Personality Traits in Women with Involutional Melancholia" *Smith College Student Social Work*, XII(1941), 191-192
37 Haynes, E and Jacobs, J S L "The Treatment of Involutional Psychosis in the Male" *Wisconsin Medical Journal*, XLIV(1945), 209-212
38 Hecker, A O "Schizophrenia A Neurobiologic Approach" *Annals of Internal Medicine*, XV(1941), 678-699
39 Heiman, Morris, Harpham, Dorothy, and Rosenblum, Marcus "Non-schizophrenic Catatonic States" *New York State Journal of Medicine*, XLII(1942), 624-627
40. Hoffman, Jay L "Psychotic Visitors to Government Offices in the National Capital" *American Journal of Psychiatry*, XCIX(1943), 571-575
41 Hyde, R W and Kingsley, D V "Studies in Medical Sociology I The Relation of Mental Disorders to the Community Socio-Economic Level" *New England Journal of Medicine*, CCXXXI(1944), 543-548
42 Jahrreiss, Walter O "Some Influences of Catholic Education and Creed Upon Psychotic Reactions" *Diseases of the Nervous System*, III (1942), 377-381
43. Johnson, Winifred B "Euphoric and Depressed Moods in Normal Subjects, Part I" *Character and Personality*, VI(1937), 212-216
44 Kallmann, Franz "Modern Concepts of Genetics in Relation to Mental Health and Abnormal Personality Development" *Psychiatric Quarterly*, XXI(1947), 535-553
45 Kanner, Leo "Frosted Children" *Time*, April 26, 1948, pp 77-78
46 Kant, Otto "Study of a Group of Recovered Schizophrenic Patients" *Psychiatric Quarterly*, XV(1941), 262-283
47 Kant, Otto "'Inappropriate Laughter' and 'Silliness' in Schizophrenia" *Journal of Abnormal and Social Psychology*, XXXVII(1942), 398-402
48 Kant, Otto "Clinical Analysis of Schizophrenic Deterioration" *Psychiatric Quarterly*, XVII (1943), 426-445
49 Kant, Otto "The Evaluation of Prognostic Criteria in Schizophrenia" *Journal of Nervous and Mental Disease*, C(1944), 598-605
50 Kant, Otto "Clinical Investigation of Simple Schizophrenia" *Psychiatric Quarterly*, XXII (1948), 141-151
51 Karnosh, L J and Zucker, E M *Handbook of Psychiatry* St Louis Mosby, 1945
52 Kasanin, J S "Developmental Roots of Schizophrenia" *American Journal of Psychiatry*, CI (1945), 770-776
53 Katz, B *The Etiology of the Deteriorating Psychoses of Adolescence and Early Adult Life* Doctoral Dissertation, University of Southern California, 1939
54 Katzenelbogen, S "Dementia Praecox Formulation by Kraepelin, Bleuler and Meyer" *Psychiatric Quarterly*, XVI(1942), 439-453
55 Klopfer, Bruno "Is Inclination to Mental Disease Within a Population Group a 'Racial' Factor?" *Psychiatric Quarterly*, XVIII(1944), 240 272
56 Kraepelin, Emil *Clinical Psychiatry* (trans by A Ross Diefendorf) New York Macmillan, 1937
57 Kraines, Samuel H *The Therapy of the Neuroses and Psychoses* (3rd ed) Philadelphia Lea and Febiger, 1948
58 Kretschmer, Ernst *Physique and Character* New York Harcourt, Brace, 1925.
59 Levy, Erwin "Some Aspects of the Schizophrenic Formal Disturbance of Thought" *Psychiatry*, VI(1943), 55-69
60 Lewis, Nolan Don C *Research in Dementia Praecox* New York The National Committee for Mental Hygiene, 1936
61 Lewinson, Thea Stein "Dynamic Disturbances in the Handwriting of Psychotics, with Reference to Schizophrenic, Paranoid, and Manic-depressive Psychoses" *American Journal of Psychiatry*, XCVII(1940-1941), 102-135
62 Lopez, C "Ethnographische Betrachtugen uber Schizophrenie" *Zeitschrift fur die gesamte Neurologie und Psychiatrie*, CXLII(1932), 706-711.

63. Lyon, H T *Annual Report of the Department of Mental Hygiene,* State of New York Albany 1938-1940
64 Maisel, Albert Q "Hope for Millions" *McCall's,* September, 1949
65 Malzberg, Benjamin *Social and Biological Aspects of Mental Disease* Utica, New York New York State Hospitals Press, 1940
66 Masserman, Jules H *Principles of Dynamic Psychiatry* New York Saunders, 1946
67 Menninger, Karl "Diagnosis and Treatment of Schizophrenia" *Bulletin of the Menninger Clinic,* XII(1948), 96-106 Reprinted by permission of the author and *Bulletin of the Menninger Clinic*
68 Menninger, Karl and Rapaport, David "Schizophrenia" *American Journal of Psychiatry,* CIII(1947)
69 Menninger, William C *Psychiatry in a Troubled World* New York Macmillan, 1948
70 Meyer, Adolf "Fundamental Conceptions of Dementia Praecox" *Journal of Nervous and Mental Disease,* XXXIV(1906), 331-336
71 Meyer, Adolf "The Dynamic Interpretation of Dementia Praecox" *American Journal of Psychology,* XXI(1910), 385-403
72 Meyer, Adolf "Fundamental Conceptions of Dementia Praecox" *British Medical Journal,* II(1906), 757-760
73 Meyer, Adolf "The Nature and Conception of Dementia Praecox" *Journal of Abnormal Psychology,* V(1910), 274-285
74 Miller, Charles W "The Paranoid Syndrome" *Archives of Neurology and Psychiatry,* XLV (1941), 952-963
75 Miller, Charles W "Factors Affecting the Prognosis of Paranoid Disorders" *Journal of Nervous and Mental Disease,* XCV(1942), 580-588
76 Milner, K O "The Environment as a Factor in the Aetiology of Criminal Paranoia" *Journal of Mental Science,* XCV(1949), 124-132 Reprinted by permission of G W T H Fleming, Editor-in-Chief
77 Myerson, Abraham and Boyle, Rosalie D "The Incidence of Manic-Depressive Psychoses in Certain Socially Important Families Preliminary Report" *American Journal of Psychiatry,* XCVIII(1941), 11-21
78 Oltman, Jane and Friedman, Samuel "The Role of Hostility in Affective Psychoses" *Journal of Nervous and Mental Disease,* XCVII (1943), 170-196
79 Page, James D and Landis, Carney "Trends in Mental Disease, 1910-1940" *Journal of Abnormal and Social Psychology,* XXXVIII(1943), 518-524
80 Palmer, H D. *Involutional Psychoses Melancholia* Public Health Reports, Supplement No 168 Washington D C 1942, 118-124
81 *Patients in Mental Institutions,* 1943, U S Department of Commerce Washington, D C, U S Government Printing Office, 1946
82 Pastore, Nicholas "The Genetics of Schizophrenia" *Psychological Bulletin,* XLVI(1949), 285-302
83 Peterson, W F and Reese, H H "Psychotic and Somatic Inter-relations" *Journal of the American Medical Association,* CXV(1940), 1587-1590
84 Pollak, O J "Post-mortem Studies in Mental Patients Frequent Findings in Paranoid States" *American Journal of Clinical Pathology,* IV (1944), 289-300
85 Prados, Miguel and Ruddick, B "Depressions and Anxiety States of the Middle-aged Man" *Psychiatric Quarterly,* XXI(1947), 410-430
86 Radzinski, J M "Constitutional vs Accidental Factors in Mental Disease" *Illinois Medical Journal,* LXXXIV(1943), 125-131
87 Rennie, Thomas A. C "Analysis of One Hundred Cases of Schizophrenia with Recovery" *Archives of Neurology and Psychiatry,* XLVI (1941), 197-229 Reprinted by permission of the American Medical Association and Dr Rennie
88 Rennie, Thomas A C (with the help of J B Fowler, A B) "Prognosis in Manic-Depressive Psychoses" *American Journal of Psychiatry,* XCVIII(1942), 801-814
89 Rosen, Harold and Kiene, Hugh E "Paranoia and Paranoiac Reaction Types" *Diseases of the Nervous System,* VII(1946), 330-337 Reprinted by permission of the Physicians Postgraduate Press
90. Ross, John R *et al* "The Pharmacological Shock Treatment of Schizophrenia" *American Journal of Psychiatry,* XCVII(1941), 1007-1023
91 Rupp, Charles and Fletcher, Elizabeth "A Five to Ten Year Follow-up Study of 641 Schizophrenic Cases" *American Journal of Psychiatry,* XCVII(1941), 1007-1023
92 Sheldon, William H *The Varieties of Temperament* New York Harper, 1942
93 Sherman, M "Hallucinations in Children" *Journal of Abnormal and Social Psychology,* XIX(1924), 165-170.
94 Sherman, M and Jost, H "Qualifications of Psychophysiological Measures" *Psychosomatic Medicine,* VII(1945), 215-219
95 Slater, E T O "Genetics in Psychiatry" *Journal of Mental Science,* XC(1944), 17-35

96 Stein, E S "The Psychopathology of Manic-Depressive Disorder and Involutional Melancholia" *British Journal of Medical Pathology,* XX(1944), 20-32

97 Strecker, Edward A "Involutional Melancholia" *New York State Journal of Medicine,* XLII(1942), 530-534

98 Taylor, John H "A Further Report on the Use of Shock Therapy Results in 1,302 Cases" *Diseases of the Nervous System,* V(1944), 56

99 Thornton, Nathaniel "Some Mechanisms of Paranoia" *Psychoanalytic Review,* XXXV (1948), 290-294

100 Thorpe, Louis P and Katz, Barney *The Psychology of Abnormal Behavior,* p 450 Copyright 1948 by The Ronald Press Company

101 Tietze, Christopher, Lemkau, Paul; and Cooper, Marcia "Schizophrenia, Manic-Depressive Psychosis and Social-Economic Status" *American Journal of Sociology,* XLVII(1941), 167-175

102 Traven, Bruno *The Treasure of Sierra Madre* New York Knopf

103 Veit, Henry, "Insulin Therapy at Colorado Psychopathic Hospital." *Diseases of the Nervous System,* VIII(1947), 320-323

104 Weisz, Stephen "Types of Depressive Reactions" *Diseases of the Nervous System,* VIII (1947), 212-216 Reprinted by permission of Physicians Postgraduate Press

105 Werner, August A "The Male Climacteric—Report of 273 Cases" *Journal of the American Medical Association,* CXXXII (1946), 188-194,

106 Wiggins, E J and Lyman, R S "Manic Psychosis in a Negro" *American Journal of Psychiatry,* C(1944), 781-787

107 Winkelman, N W and Book, M H "Observations on the Histopathology of Schizophrenia" *American Journal of Psychiatry,* CV(1949), 889-896

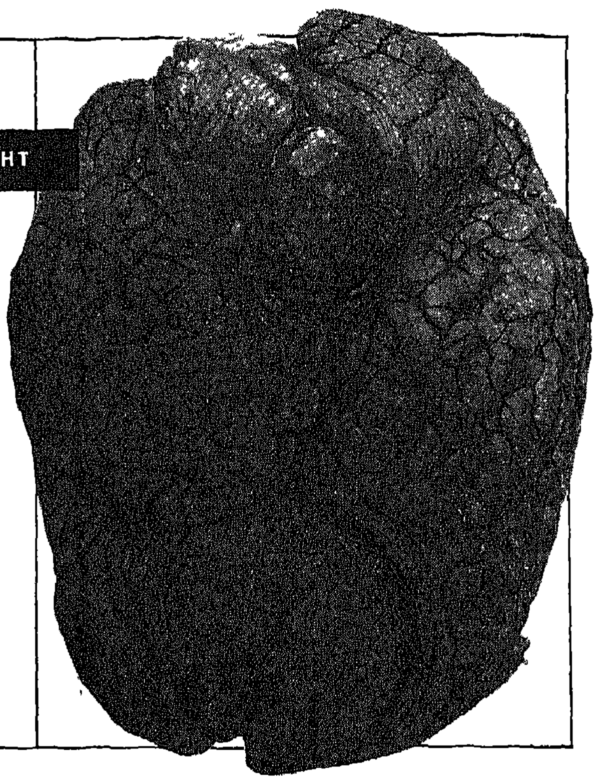
108 Wittman, Mary P and Huffman, Arthur V "A Comparative Study of Developmental, Adjustment and Personality Characteristics of Psychotic, Psychoneurotic, Delinquent and 'Normally' Adjusted Teen-aged Youths" *Elgin State Hospital Papers,* V(1944), 228-237

109 Yerbury, Edgar C and Newell, Nancy "Genetic and Environmental Factors in Psychoses of Children" *American Journal of Psychiatry,* C(1943), 599-605

CHAPTER EIGHT

MENTAL DISORDERS WITH TOXIC OR ORGANIC BRAIN PATHOLOGY

Disorders Associated with Infectious Diseases • Brain Tumor • Head Injury • Toxic and Metabolic Disturbances • Neurological Disorders of Unknown Etiology • Epilepsy • Old Age



There are a number of illnesses and other organic conditions which affect the central nervous system, giving rise to mental and behavioral disturbances These may involve the simple deterioration of mental and motor processes and/or a wide range of neurotic and psychotic reaction patterns, depending upon (1) the nature and extent of the damage to the nervous system, and (2) the previous (pre-morbid) personality of the patient—in terms of his ability to compensate for such damage and to adjust to any changes in his life situation brought about by the pathology

Of the two, the second is fully as important as the first In fact, the severity of the mental disorder seems to correlate with the degree of previous emotional instability and immaturity, rather than with the amount of neural damage There are many cases involving severe brain damage in which mental change is astonishingly slight and may go completely unnoticed by family and friends These variations are to be explained by the previously emphasized fact that the individual reacts to all stress, whether organic or psychological in nature, as a holistic, functional unit A well-integrated person can withstand brain damage or any other stress better than a rigid, immature, or otherwise psychologically handicapped individual

Thus, in general, the clinical symptoms in organic reactions are much the same as those which the patient would have developed in response to any other precipitating stress—he may become hypochondriacal, depressive, paranoid, or develop any of the other neurotic or psychotic patterns

However, since the nervous system represents the essential basis for the integration of behavior, there are limits to the amount of neural damage that an individual can tolerate or compensate for without manifesting symptoms of mental illness Where the brain

damage is extensive there are certain symptoms that stem directly from the impaired functioning of the nervous system The nature and severity of these symptoms will, of course, depend upon the nature and extent of the brain damage, but they typically include

1 Impairment of intellectual functions, affecting comprehension, memory, ability to concentrate, and judgment

2 Emotional lability or instability, with general emotional oversensitivity and arousal to laughter or tears with minor provocation

3. Deterioration in conduct and behavior standards, with carelessness in personal appearance, loss of interest in occupation and family, and lowering of moral controls

4 Sensorimotor disturbances, which may include aphasia, paralyses, incoordination, and many other neurological manifestations

The disorders associated with brain pathology may be either acute or chronic A frequent type of acute mental disturbance is delirium, with disorientation, delusions, hallucinations, emotional excitement, and general mental turmoil In many organic conditions both acute and chronic reactions may appear the slowly progressing disease condition may be broken by occasional acute periods which resemble a delirium.

About half of the first admissions to mental hospitals are psychoses and other disorders in which there is demonstrable damage to the nervous system. The causes of such damage are numerous, and since each is associated with its own pattern of symptoms and development, the present chapter will be devoted to an examination of each of the major causes of brain damage and the disorders associated with it. We shall give special attention to disorders associated with infectious diseases, brain tumors, head injury, metabolic disturbances and various kinds of toxins, epilepsy, and brain changes of old age There are also a number of comparatively rare degenerative diseases of the nervous system whose etiology is largely unknown and which we shall not discuss at great length

PSYCHOSES ASSOCIATED WITH INFECTIOUS DISEASES

Mental disorders may appear in connection with brain infections resulting from bacteria or viruses. These microorganisms invade the brain and damage or destroy nerve tissue. Among the major infectious diseases of the brain are (1) general paresis, (2) juvenile paresis, (3) cerebral syphilis, (4) epidemic encephalitis, and (5) epidemic cerebrospinal meningitis *

GENERAL PARESIS

General paresis is a mental disorder caused by damage to the brain tissue resulting from the progressive infiltration and destruction of these tissues by the spirochetes of syphilis This disorder has also variously been called *general paralysis of the insane, dementia paralytica,* and *paresis* It has been estimated that about 5 per cent of all untreated syphilitics become paretic[66]. The first symptoms usually appear from two to twenty years after the initial infection, and unless the patient receives treatment, death ordinarily follows in four years or more The average age of onset is approximately 44 years for men and 42 years for women, although it may occur in extreme old age General paresis constitutes about 4 per cent of all first admissions to mental hospitals

Development of general paresis. Because paresis is only one of the possible end results of infection by syphilis, our understanding of its development will necessitate a somewhat detailed consideration of syphilis and its progressive stages

Syphilis is an infectious disease which has taken an incalculable toll in human lives and

* Various other infectious diseases such as scarlet fever, measles, and smallpox may involve temporary delirium or other transitory psychotic symptoms

happiness, for unless properly treated it eventually disables and then kills its victims. It apparently appeared on the stage of history with dramatic suddenness only a few centuries ago and spread within a few years as a great plague over the known world (Pysey[72]).

Many medical historians contend that syphilis was introduced into Europe by the members of Columbus' crew, who presumably contracted it from the women of the West Indies In fact, Kemble[41] points out that Columbus himself may have been infected During his second voyage, in 1494, Columbus began having attacks of fever, possibly indicating the secondary stage of syphilis During his third voyage, in 1498, he developed "a severe attack of gout" which was widespread and not confined to one or two of the smaller joints as gout usually is. During this voyage also, the first signs of mental disorder made their appearance. He began to hear voices and to regard himself as an "ambassador of God" On his last voyage, in 1504, Columbus was so ill that he had to be carried ashore His whole body was dropsical from the chest downward, his limbs were paralyzed, and his brain affected—all symptoms of the terminal stages of syphilis.

Whatever the origin, syphilis spread like a tornado throughout Europe and became known as "The Great Pox" (Parran[61], Pysey[72]) In 1496 the disease appeared in Paris and the number of victims became so great that the government was forced to pass an emergency decree forbidding a syphilitic to leave his home until completely cured * In Edinburgh during the same year, all afflicted inhabitants were ordered into banishment on an island near Leith

The numerous armies of mercenaries and adventurers of that period no doubt contributed materially to the rapid spread of the disease Apparently also this early strain of syphilis was both extremely contagious and unusually virulent, and attacked its victims with a violence almost unknown today † High fever, delirium, violent headaches, horrible sores, and bone ulcers were typical even during the early stages of the disease By 1498 the disease had spread to England. Vasco da Gama and his pioneering Portuguese are credited with carrying it around the Cape of Good Hope, and an outbreak occurred in India in 1498, spreading eastward to China by the year 1505

During this early period there was no name for the disease Each suffering nation blamed it upon some other nation The Italians called it the *French* or *Spanish disease,* the English called it the *French pox* and so on It finally received its specific name when in 1530 an Italian physician, Fracastorius, wrote a long poem about the disease in which the leading character, a shepherd named Syphilis, was stricken with it because of an insult to Apollo. The poem became tremendously popular, and *syphilis* became the accepted name for the dread disease.

Although many early theories of treatment contained some germs of truth, the physicians of that day could offer little help, and it was several hundred years later before any major advances were made in the conquest of syphilis In Chapter 2 we sketched the several steps by which the deadly spirochete that causes syphilis was discovered, blood tests developed, and methods of treatment worked out Although it is still a major medical problem today, the means of its control are now available

The spirochete of syphilis may gain entrance to the body through minute breaks or scratches in the skin or directly through mucous membranes such as the lining of the mouth or the genital tract Even though the mucous membrane may be intact, the spirochete can wriggle through it in an hour or

* A "cure" probably meant the temporary remission or disappearance of symptoms—common during the third stage of syphilis—which the people of that period mistook for recovery

† Undoubtedly the severity of this disease was also due in part to the lack of resistance or partial immunity usually acquired in the case of older diseases

so. Syphilis is typically spread from person to person during sexual intercourse, although in exceptional cases it may be contracted through kissing or from direct contact with open syphilitic sores or lesions. It may also be transmitted from mother to child during fetal development; in this case it is referred to as *congenital syphilis*

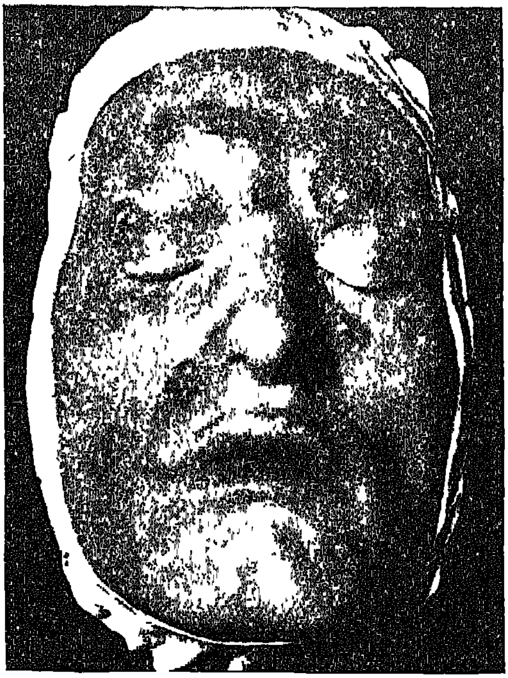
Once it has breached the outer defenses of the body, the spirochete begins its systematic destruction of the body in four fairly well-defined stages.

First stage Immediately after the spirochetes gain entrance to the body, they begin to multiply rapidly From 10 to 40 days later, a sore called a *hard chancre* appears at the point of infection, which usually takes the form either of a pimple that feels hard to the touch or of an open ulcerated sore In some instances it may be so insignificant that the patient is unaware of its existence Even if untreated, this sore disappears in from four to six weeks, often leaving the victim with the mistaken notion that it was really only a minor irritation or that he is now cured

Second stage Following the chancre by some three to six weeks is the appearance of a copper-colored skin rash which may be

The corkscrew-like spirochetes of syphilis They may attack any tissue or bodily organ.





Severe skin eruption in second stage syphilis.

mild and transitory or more severe, covering the entire body This skin eruption may look like measles or smallpox and originally gave rise to the term *Great Pox* to differentiate this disease from *smallpox* The rash may or may not be accompanied by fever, headaches, indigestion, loss of appetite, loss of hair in spots over the scalp, and other symptoms not usually thought of in connection with syphilis.

Third stage This is known as the latent period, for in most cases all symptoms disappear. Again the victim is apt to think he is cured and so either avoid or discontinue treatment During this period, however, the spirochetes are attacking various internal bodily organs and, if untreated, cause permanent degeneration The spirochetes may attack the bone marrow, the spleen, the lymph glands, or any tissue or organ of the body. Blood vessels and nerve cells seem to be favorite targets.

Fourth stage In this last stage we see the accumulated damage produced during the latent period Ten, twenty, and even thirty

years after the initial infection, the degenerative work of the spirochete may become apparent in a sudden heart attack, the failure of vision (15 per cent of all blindness is due to syphilis), a loss of motor coordination in walking, or mental disturbances (Parran[64]). Syphilis is often called the "great imitator" because of the wide range of organic disease symptoms that it may produce. The most frequent and fatal forms of late syphilis are those in which the spirochete invades the walls of heart and blood vessels and the nervous system. It is the latter with which we are primarily concerned in our study of abnormal psychology

Symptoms of general paresis. General paresis is associated with a wide range of organic and psychological symptoms The physical symptoms in general paresis are well delineated The pupils are irregular in size and the pupillary reflex to light is either sluggish or entirely absent There is typically a marked tremor of the lips and tongue, and speech functions become badly disturbed, with considerable stuttering and slurring of words A phrase which invariably gives trouble and is of diagnostic significance is "Methodist Episcopal" This may be mispronounced "Meodist Epispal" or "Methdist Pispal," etc Writing is similarly disturbed, with tremulous lines and the omission or transposition of syllables Frequently the patient has a rather vacant, dissipated look, with a silly grin

Where the spirochetes have also damaged neural pathways within the spinal cord, the patient may have difficulty in motor coordinations Such patients typically have a shuffling, unsteady walk referred to as *locomotor ataxia* In addition there may be tremors of the face, lips, and fingers, and an absence of tendon reflexes, such as the knee jerk With severe brain damage there may also be convulsive seizures resembling epilepsy

The early signs of the disorder are frequently unrecognized by family and friends until an acute episode of some sort occurs The family of one patient noticed nothing particularly wrong until the patient one day went to a bar instead of his office, and there became noisy and expansive. Actually there had been less obvious symptoms, including forgetfulness of business appointments and peculiar color combinations in dress for several months preceding, but no one had noticed

In general the patient loses interest in his work and becomes careless and inefficient in his work habits Letters go unanswered, appointments are forgotten, and work hours and other regulations may be ignored. Personal habits may show some deterioration, and the once-neat person may become slovenly in personal appearance Comprehension and judgment suffer, and the patient may show a tendency to evade important problems, or he may react to them with smug indifference He seems unable to realize the seriousness of his behavior and may become irritable or resort to ready rationalizations if his behavior is questioned Overly sentimental behavior is typical and may involve promiscuous sexual patterns.

The progression of the disorder is accompanied by gradual personality deterioration. Intellectual functions become increasingly impaired; the patient may be unable to remember what he did even a few minutes before He may ask when dinner will be served only a few minutes after he has finished it. This memory impairment extends to remote events, and the patient may fill in memory losses by various fabrications The individual becomes unable to comprehend the simplest problems or carry through the simplest calculations Judgment no longer is worthy of the name The patient may optimistically squander his money on the most harebrained schemes, or become involved in a variety of immoral and antisocial activities Ethical and moral restraints gradually disintegrate, and the patient may exhibit deceitful, dishonest, or lewd behavior

This entire picture of intellectual deteriora-

tion is usually colored by emotional reactions in the form of either marked euphoria, depression, or apathy. Thus three categories are commonly used to distinguish clinical types—*expansive, depressed,* and *demented*—although these types are by no means always distinct, and depressed patients frequently change categories by becoming euphoric. In addition, it may be re-emphasized that the type of psychotic or psychoneurotic reaction exhibited by the paretic, aside from direct effects of the cerebral intoxication, injury, or deterioration, is essentially that which the individual would have developed had other precipitating stresses been involved. In short, the symptom picture is primarily determined by the pre-psychotic personality of the patient and may be chiefly manic, depressive, schizophrenic, involutional, or a mixture of these reaction patterns. Eventually, however, increasingly extensive brain damage leads to the same general cerebral incompetence in the terminal stages in all personality types.

1. *The expansive type.* Many paretics become extremely euphoric and expansive. If the patient is asked how he feels, he may answer "Just wonderful! Everything is just perfect!" He often shows an overevaluation of himself in the form of delusions of grandeur. He may state that he is the richest and most powerful man in the world. When asked if he had a million dollars, one patient euphorically admitted he had billions of dollars as well as an abundance of other material possessions such as "about a million of the latest model Cadillacs, millions of wonder homes, and the best race horses in the country."

Such patients, with optimistic abandon, may plan gigantic projects involving huge sums of money. One patient had plans to build a superhighway from New York to China that would be at least a hundred miles wide. They seem utterly unable to realize the ludicrous nature of their claims and look forward to the outcome of every idea, and for that matter the entire future, with the utmost optimism. As might be expected, delusional ideas here are poorly systematized. When their ideas are questioned, patients may become irritable, but more often they dismiss criticisms as inconsequential.

The following description of a paretic patient will serve to illustrate the typical symptoms in expansive cases.

"C. W. flew planes from the United States to North Africa. His route began in Florida, passed through Natal, Ascension Island, and terminated in Dakar. His earlier health record was excellent, save for some 'difficulty' in his early twenties. Now, at 38, he was strong, well liked, and an expert pilot in the ferry command. He had completed a dozen or more trips.

"As he flew his plane eastward on his last journey, C. W. was unusually gay. 'It's a great world,' he sang. 'My rich aunt in Oklahoma is going to leave me $30,000,000.'

"During the periods of relief by his co-pilot, he talked loudly and became chummy with other members of the crew. As a matter of fact, he offered to loan the navigator $50,000. Landing safely in Dakar, his high spirits continued. Then his friends found him buying several 'diamonds' from an Arab street merchant, spending most of his cash for this purpose.

" 'Boy,' he exclaimed, 'I got a swell bargain! Six diamonds for $100 cash now and $100 more on my next trip! I sure fooled that Arab, he's never going to collect the rest from me.'

" 'How do you know the diamonds are genuine?' he was asked.

" 'I tested them,' he boasted. 'I struck one with a hammer and it proved hard, diamonds are hard.'

"Upon the return journey, C. W. continued the story of his expected wealth and the sum grew with the distance of travel.

" 'It's $40,000,000 I am getting and I expect to share some of it with you guys,' he announced. When his co-pilot received this astounding information with doubt and anxiety, C. W. could not understand it. When the co-pilot asked him to rest, he assured him that his body was perfect,

that he didn't need rest. Then he added that he could fly the plane without gas, which he tried to prove by doing some fancy maneuvers in the sky.

"'Funny,' he said later, 'no one seemed to believe me Even when I offered them a million each they weren't happy, but looked at each other in such a puzzled way It made me laugh, how they begged me to rest and how worried they looked when I refused. I was the boss and I showed them'

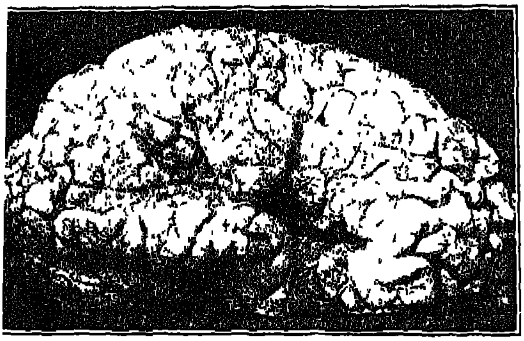
"When the plane landed in Brazil by a miracle, C. W was examined by a physician, forced into another plane and brought to Florida Upon examination he was talkative, eyes gleaming, exuberant with statements of wealth and power 'I am now one of the richest men in the world,' he said 'I'll give you $5,000,000 to start a hospital My eyes are jewels, diamonds, emeralds,' . . ." (Fetterman[28], pp. 267-268)

2. *Depressed type* Some patients react to the progressive organic damage by becoming discouraged and depressed. Such patients usually have some insight into their failing functions and general life situation, though this insight is usually lost as the disorder progresses. Depressed patients frequently develop bizarre hypochondriacal delusions—they may be convinced that they have no brain, or that their bowels are completely stopped up, or that they are dead Although suicidal attempts among such patients are not uncommon, the intellectual deterioration usually results only in rather childish, unsuccessful attempts

Occasionally depressed patients show considerable anxiety and agitation Even though their mood is predominately one of depression, they occasionally become expansive at one time and then depressed again at another In general, depressed patients become expansive as their personality deterioration becomes increasingly severe

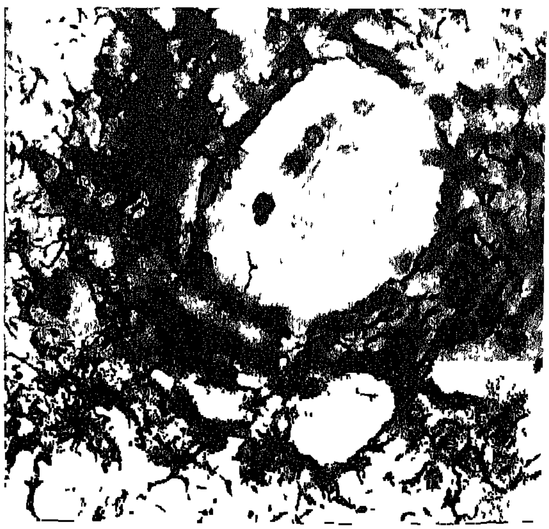
The following brief conversation with a depressed female paretic, 42 years of age, serves further to illustrate these symptoms.

Dr How are you today, Miss——?
Pt Not so good doctor . . (pause)
Dr What seems to be your difficulty?
Pt My brain has been eaten away . I am no longer living, just a dead shell (shakes head despondently).



Courtesy of Pacheco de Silva and Dr. Olkon[93]

The syphilitic spirochete, Treponema pallidum, not only invades and damages the blood vessels of the brain, thus interfering with the normal nutrition of the nerve cells, but it also attacks and damages the brain membranes and nerve cells proper The picture above shows damaged areas in the brain of a syphilitic patient The view on the right shows spirochetes attacking the cortex



Courtesy of Dr. Olkon[93]

Dr. How do you account for this trouble?

Pt I don't know doctor. . . . I have ruined my life . . my brain is gone . there is no hope . (stares at floor) . my heart has stopped beating . I am only a dead shell . . it's all over now

3. *Demented or simple type* Strictly speaking, all patients show gradual intellectual and personality deterioration and hence are demented. However, this term is usually used to indicate cases where there is no pronounced euphoria or depression, and where the symptom picture consists chiefly of apathy, memory impairment, and general personality deterioration Often the clinical picture here is similar to that in schizophrenia, with a gradual withdrawal from the environment accompanied by delusions and hallucinations, usually of a simple nature

Although the various physical symptoms, together with deterioration of behavior in a previously well-adjusted individual, may be indicative of general paresis, the final diagnosis must rest upon the actual presence of the spirochete in the patient's blood stream and nervous system, readily demonstrable by means of blood and spinal-fluid tests

"A woman of twenty-six was brought to the hospital because she had become lost when she attempted to return home from a neighboring grocery store About seven months before the patient's admission her husband noticed that she was becoming careless of her personal appearance and neglectful of her household duties She often forgot to prepare the family meals, or in an apparent preoccupation would burn the food She seemed to have little appreciation of time and would not recognize when to get up or to go to bed The patient would sit idly about the house staring uncomprehendingly into space

"At the hospital the patient entered the admission office with an unsteady gait There, by way of greeting, the physician inquired, 'How are you today?' to which she replied in a monotonous, tremulous tone, 'N-yes-s, I was-s op-er-a-ted on for 'pen-pendici-ci-tis.' She never made any spontaneous remarks and when, a few days after her admission, she was asked if she were sad or happy she stared vacantly at the physician and with a fatuous smile answered, 'Yeah' The patient would sit about the ward for hours, taking no interest in its activities Sometimes she would hold a book in her lap, aimlessly turning the leaves, never reading but often pointing out pictures like a small child and showing satisfaction when she found a new one to demonstrate Neurological examination showed dilated pupils that reacted but slightly to light and on convergence. There was a coarse tremor of lips and facial muscles on attempt to speak The protruded tongue showed a coarse tremor All deep tendon reflexes were hyperactive The Wassermann reaction was strongly positive on both blood serum and cerebrospinal fluid" (Noyes[62], pp 180-181)

Dynamics. Essentially, of course, the clinical picture is largely determined by the nature and extent of the cortical damage, rather than by the fact that it is caused by syphilis Thus the symptoms and general dynamic pattern in general paresis are not essentially different from those in other organic psychotic reactions The cerebral damage results in the general lowering of adaptive controls and eventually in the severe impairment of intellectual functions

As we might expect, the depressive patients, with their hypochondriacal delusions, often have feelings of guilt, apprehension, and self-recrimination over previous behavior as well as some insight into their present condition The patient with less insight or a more optimistic and outgoing pre-psychotic personality apparently attempts to compensate for his failing functions by rationalizations and expansiveness Due to the general intellectual impairment and the loss of adaptive controls, this reaction usually badly overshoots its ego defensive mark, which accounts for the wild exaggeration With progressively greater neural damage the patient becomes less able to compensate for it until, without proper treat-

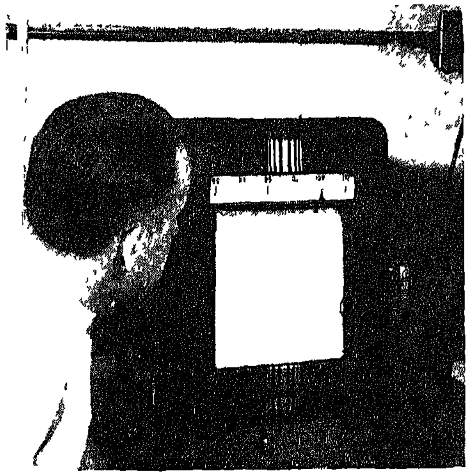
ment, he is reduced to a vegetative existence and eventual death

One question which has long puzzled investigators in this field is why only one out of twenty untreated syphilitics ever develops general paresis Also, why is it more common in certain racial groups and in certain countries than in others? A far higher percentage of whites than Negroes develop general paresis after syphilitic infection Also, far more male than female syphilitics develop it Some investigators have suggested specific strains of spirochetes to account for the differences, others hold that the syphilitic spirochetes attack the most vulnerable organs of the patient's body and that general paresis develops in patients whose brain tissue has a low resistance to syphilis Still other investigators have emphasized the role of head injury, frequently found prior to the onset of symptoms in general paresis Again, however, the final answers to these questions are not yet available.

Treatment and prognosis. Treatment in paresis is a specialized medical field, but at the present time fever therapy, combined with the administration of antisyphilitic drugs such as tryparsamide, seems to be most widely used Fever therapy is based upon the high vulnerability of the syphilitic spirochete to above-normal bodily temperatures. Ordinarily it involves the inoculation of the patient with malaria, but more recently various other methods of artificially induced fever have been developed, such as (1) diathermy, which involves placing the patient in an electrically heated cabinet, (2) radiothermy and inductothermy, based upon electronics, and (3) vapotherapy, which involves the circulation of air highly saturated with warm water

There was a great deal of enthusiasm over the introduction of penicillin treatment in general paresis, but as yet the results of penicillin alone have proved rather disappointing Stokes and Steiger[81] report that penicillin alone is still outranked by malaria fever treatment in effectiveness However, a combination of penicillin and malaria therapy is apparently





Because syphilis may mock the symptoms of other diseases or may have no external manifestations at the time of examination, the physician cannot be sure of his diagnosis merely by looking at a patient In the Wassermann test, blood is drawn from a vein (left) for laboratory analysis

Where a diagnosis of neurosyphilis is made and fever treatments are given, it is essential that the patient's temperature be maintained at exactly the right level, hence it is checked constantly, as by the automatic recording machine shown above

even more effective than either one singly (Bennet[4]). Reynolds[73] and others report that 58 per cent of their series of patients showed clinical improvement through the combined use of malaria and penicillin Although medical therapy represents the essential basis for treatment, psychotherapy and various therapeutic adjuncts may also be of vital importance in the full or partial rehabilitation of the paretic. As already indicated, if the paretic patient does not receive adequate medical attention, the outlook is progressive deterioration to a vegetative existence and death

Actual results in cases receiving medical therapy depend to a large extent upon the amount of cerebral damage that has taken place before treatment is started If the damage is not too extensive, the compensatory capacities of the individual—both neurological (in terms of reorganization functions in the nervous system) and psychological—may leave only a small residue of actual impairment Where extensive damage has taken place, about all that can be hoped is to arrest further inroads of the disease In such cases the intellectual picture may show remarkable improvement, but the patient never returns to his previous level of intellectual ability When treatment is instigated shortly after the appearance of initial symptoms, the prognosis is approximately as follows.

1 Some 20-30 per cent of the patients show adequate recovery and can resume their former occupation and their activities. Some slight degree of impairment may, of course, remain
2. Another 30-40 per cent show some improvement and may be returned to their homes but are unable to resume their former activities because of lowered mental capacity or general deterioration
3 15-25 per cent show no improvement.
4 Approximately 10 per cent die

Prevention. The only fully adequate and successful treatment for general paresis is of course the prevention of syphilitic infection or the early detection and treatment where infection has taken place. Since general paresis is only one of the disabling results of the insidious spirochetes of syphilis, the importance of the preventive aspects of the control of syphilis cannot be overemphasized

Former Surgeon General Thomas Parran[65] has listed three steps which he considers indispensable for conquering syphilis (1) remove the greatest source of infection, which is commercialized prostitution—estimated to cause 75 per cent of all infections, (2) find and treat all infected cases, and (3) use prophylaxis, not as a safeguard for license, but as a supplement to safety

There have been widespread recent advances in the control and prevention of syphilis, such as free diagnosis and treatment, the requirement by most states of a careful physical examination before marriage, and various public educational campaigns vigorously promoted by federal, state, and local civic, religious, and educational agencies The school can play a vitally important role in imparting correct attitudes and adequate information concerning the nature, development, and disastrous effects of syphilis Social-welfare and related agencies are also of great value inasmuch as the rates for syphilis are highest in congested slum areas and among lower socio-economic groups The extent of sexual intercourse in our population prior to and outside of marriage, without going into the moral and social implications of this behavior, further suggests the importance of adequate public information concerning prevention and control of syphilis

Already results of the concerted efforts to control and prevent syphilis are apparent. In 1938 the number of civilian cases reported was 480,140 although it has been estimated that actually a far larger number of our population (some 3,000,000) then had syphilis (Parran and Vonderlehr[65], Williams[94]) Concerted military, civilian, and social action has considerably reduced these numbers In 1948 the number of civilian cases reported had

dropped to 338,141. During the years 1948-1949 it has been estimated that the number of new cases dropped 20 per cent even though there were 30 per cent more clinical examinations (*Time*[86]) Although such action is gradually bringing syphilis under control, it must still be considered a major health problem.

JUVENILE PARESIS

Juvenile paresis results from congenital syphilis and is a condition of general paresis occurring in childhood or adolescence Although no longer a major problem in the United States, congenital syphilis is common in certain other countries, where the infant mortality approximates 5 per cent, largely as a result of untreated syphilis

Symptoms. The symptoms in juvenile paresis are essentially the same as those in general paresis and involve a general picture of progressive mental and physical deterioration, including the progressive impairment of memory, comprehension, and judgment Expansive or depressive emotional trends, motor incoordination, speech disturbances, and convulsions are common. Stealing, fighting, and emotional outbursts may also occur.

The symptoms may appear at any time after birth, although ordinarily there are no noticeable symptoms until the child approaches puberty at about the age of 10 or 12 Menninger[60] reports that 60 per cent of these children develop normally up to the time of onset of the disease.

Below is a description of a 15-year-old boy who was diagnosed as a juvenile paretic.

The patient was referred to the hospital by a school doctor after the boy had become rather "droopy" in class and began to talk in a rather funny and thick-tongued manner. On admission to the hospital the boy was slightly unsteady in his walk, his pupils were widely dilated and did not show a normal pupillary reflex to light. His emotional mood seemed to alternate from one of depression and apathy to one of mild euphoria He soiled himself, was careless in his personal appearance, and exposed himself indiscriminately to males and females alike The following conversation took place during a period of mild euphoria or expansiveness

Dr How are you feeling today, Bob?
Pt. Jus wonful, jus wonful (silly, fatuous grin)
Dr. Can you say Methodist Episcopal Church?
Pt Mesdus Episfal Chursh
Dr. How are your studies progressing at school?
Pt Jus fine, jus fine, purfect

Dynamics. Juvenile paresis is caused by damage to the brain resulting from the inroads of the spirochete of syphilis The juvenile paretic usually has less insight into his condition and is apt to show relatively simple deterioration without pronounced emotional coloring or marked psychological compensations. It is not known why not all syphilitic children develop juvenile paresis

Treatment and prognosis. The prognosis in juvenile paresis is generally unfavorable, treatment is rarely completely effective, but rather consists primarily in arresting the syphilitic processes and preventing further neural and intellectual damage The actual methods of treatment are essentially the same as those discussed under general paresis

Prevention The preventative aspects in juvenile paresis are of the utmost importance. State laws requiring all persons who intend to marry to pass physical examinations, including a Wassermann test, are of great value here And even where the syphilitic infection takes place after marriage, the infection of the fetus can still be prevented or counteracted by proper medical treatment, even into the later months of pregnancy.

Failure to maintain proper safeguards against congenital syphilis may result in all sorts of other organic impairments, as well as juvenile paresis. Syphilis accounts for more than 50 per cent of all blindness in children at birth It is also the largest cause of stillbirths and the primary reason for the deaths of many infants during the first weeks of life (Parran[64]).

Historically, Henry VIII of England has often been cited to illustrate the tragic results of congenital syphilis The first of his wives, Catherine of Aragon, bore four children, all of whom were stillborn or died immediately after birth A fifth child, a daughter, finally survived to later reign as "Bloody Mary" Mary herself showed many signs of congenital syphilis—her face was prematurely old and scarred, her hair thin and straggling, her head square, with a grotesquely protruding forehead, and her sight extremely bad. Her sudden death at the age of 42 was presumably due to syphilitic complications Of Henry's six wives, Anne of Cleves, whose marriage was never consummated, is thought by the medical historian Kemble[11] to be the only one who might have shown a negative Wassermann test.

CEREBRAL SYPHILIS

Cerebral syphilis differs from general paresis in that the syphilitic damage centers around the blood vessels and meninges of the brain rather than in the neural tissue proper. Approximately 1 per cent of all first admissions to state hospitals are diagnosed as cases of cerebral syphilis

Symptoms. Cerebral syphilis may also complicate the picture of general paresis, but in many cases the two disorders represent fairly distinct symptom patterns. The symptoms in cerebral syphilis show an earlier onset than those in general paresis, usually occurring within two to three years after the initial infection. The early symptoms differ from those in general paresis in that there is rarely any marked deterioration of conduct Rather the early symptoms include persistent headaches, dizziness, blurring or doubling of vision, and often insomnia and nausea. Lethargy, confusion, and difficulty in concentration may occur if the pressure within the cranium is greatly increased Other physical symptoms of diagnostic value include disturbed pupillary reactions to light and accentuated knee-jerk reflex. Wassermann and Kahn reactions are typically positive for the blood but not for the spinal fluid. Speech and writing are usually not markedly affected but epileptiform and apoplectiform seizures are common.

Dynamics. The dynamics in general paresis and in cerebral syphilis are essentially the same. Differences in symptom pictures represent primarily differences in the amount of brain damage During the early stages of cerebral syphilis the actual amount of brain damage is usually less than in paresis, and the deterioration is correspondingly less. In advanced cases the brain damage, symptom picture, and dynamics are comparable for the two disorders

Treatment and prognosis. The prognosis in cerebral syphilis with early treatment is more favorable than in general paresis because the blood vessels and meninges have some power of regeneration once the spirochetes have been killed. Damage to the gray matter in the central nervous system, however, as in general paresis, is permanent and irreversible In advanced cases of cerebral syphilis actual irreversible neural damage is brought about by impairment of cerebral circulation as well as by pressure from the meninges. Unfortunately, however, many cases of cerebral syphilis do not receive early treatment; thus the prognosis for the disorder, practically speaking, is still unfavorable

EPIDEMIC ENCEPHALITIS

Epidemic encephalitis* is an inflammation of the brain tissue caused by a filterable virus As in the case of the syphilitic spirochete, this virus causes diffuse degenerative changes accompanied by a variety of personality disorders. In the acute phase of the disease the patient is typically lethargic and appears to be sleeping all of the time For this reason the condition was once called *encephalitis lethargica* and is now popularly known as *sleeping sickness*

This disease was apparently uncommon prior to an epidemic in Europe and the

* *Encephalitis* designates inflammation of the brain

United States following World War I, after which it received its name *epidemic encephalitis* Since that time it has again become relatively rare, at least in virulent form, accounting for only some 0 1 per cent of all first admissions to mental hospitals Although no age group is immune, it is more common among children and young adults.

Symptoms and dynamics. The onset and acute symptoms in epidemic encephalitis may take many forms, but usually the clinical picture is one of fever, drowsiness or stupor, and ocular or pupillary disturbances The patient sleeps constantly, although he can usually be awakened long enough to answer questions or to take nourishment.

Another common form of the disease, which occasionally follows the drowsy or stuporous state, is characterized primarily by symptoms of a hyperkinetic type Here the clinical picture centers around insomnia, restlessness and agitation, irritability, excitability, and choreiform movements. In some cases the latter symptoms are complicated by delirium, disorientation, and hallucinations. Although many patients appear to make a satisfactory recovery, neurological and psychological disturbances may follow encephalitis

1. *Aftereffects in adults* A common aftereffect of this disease in adults is *Parkinson's disease*, which will be described later in the present chapter

Among other common physical aftereffects of epidemic encephalitis are twitches of the face, arm, and hand muscles, and various pupillary and ocular disturbances Included in the latter category are the "oculo-gyric crises" in which the eyes suddenly turn upward in a spasm and remain that way for several minutes

These aftereffects of epidemic encephalitis in adults do not in themselves seriously impair intelligence or result in psychological maladjustments However, the patient may react to this organic stress and to the general change in his life situation with a variety of neurotic or psychotic patterns Often he manifests an agitated depression in which he is anxious and restless and at the same time discouraged and dejected Other patients become expansive, apathetic, or withdrawn In some instances there is a progressive and general personality deterioration * Again the pre-illness personality of the patient seems to be of primary importance in determining the later clinical picture.

2. *Aftereffects in children* The aftereffects of this disease are ordinarily much more serious in children than in adults Children who were previously well behaved and cheerful often become restless, aggressive, cruel, impudent, and generally unmanageable They seem to lose their self-control and to be under a continual pressure of restless activity Often they will state that they do not want to behave as they do, but that they cannot seem to help themselves Without provocation they may impulsively engage in destructive, homicidal, sexually aberrant, and other delinquent behavior As a result, such children usually require hospitalization The precise relation of their behavior to the neurological damage is not known Among children under five years of age, mental development may be severely retarded and the child may not attain his normal intellectual status In general, the older the child, the less the mental impairment (Brown *et al*[11])

In attempting to explain the hostile and hyperactive behavior of these children, Bender[3] emphasizes three aspects of the postencephalitic behavior of the child (1) the disorganized patterning of motor impulses, (2) the inability to integrate perceptual experiences, and (3) the diffuse and relatively unpatterned anxiety apparent in these children.

According to Bender, the brain damage resulting from the encephalitis leaves these children unable to organize and interpret perceptual experiences in a normal way That is, perceptual experiences remain somewhat

* For a more detailed description of the postencephalitic syndrome, the reader is referred to Fairweather[21], who made an extensive investigation of 275 cases

chaotic in terms of their meaning to the child and are not integrated into meaningful patterns This would, of course, make it very difficult for the children to develop consistent environmental and self-attitudes in terms of which to evaluate subsequent experience and direct their behavior As a result they feel vaguely apprehensive and anxious and driven to manipulate their environment in order to try and establish some sort of order and meaning, which are prerequisites to feelings of adequacy and security It is in this sense that they are driven to reality testing—incessantly displayed in their drive toward objects and persons—while at the same time they are frustrated by their inability to learn or profit normally from such experiences. This persistent and uncoordinated drive toward mastering reality, together with their diffuse anxiety, tends to their ultimately destroying and devouring objects and to a vicious circle of catastrophic activity

The following case brings out many of the symptoms typically found in postencephalitic behavior disorders and is interesting with respect to Bender's theory

"Harold is a boy of fifteen years whose behavior is so unpredictably and dangerously impulsive that his family cannot keep him at home He must always live in an institution

"He presents a strange, almost uncannily freakish appearance He is short and squat in stature and has a short squarish head that is oversized for his body He walks with an awkward, shambling gait, a little like a monkey As you watch him, he sidles toward another child in a gingerly, apparently affectionate manner Suddenly he grasps the child's finger and bends it backward mercilessly, then he slinks impishly away, laughing and chuckling In a moment he raises his bitten nails to his mouth and stares at the cloudless sky as though abruptly transported, and mutters some incoherent remark about a 'terrible storm coming that will break all the limbs of the trees' A few minutes later with tears streaming from his eyes he presents an appearance of genuine remorse He puts his arms around the same child's neck and suddenly chokes the child painfully with a tremendous hug When a teacher pries him away he tries to bite her hand He murmurs to the teacher 'I hurt you, didn't I? Can you whip? Whip me' Perhaps a while later he may be seen to shuffle stealthily toward the same teacher and whisper to her in a childlike manner 'I like you' Then quick as a flash he may poke his finger into her eye and cry again 'Can you whip? Whip me'

"He did not thrive well in his childhood, for he was beset with many illnesses His physical and mental development was markedly retarded He failed to adjust himself to school and at home became uncontrollably provocative and destructive Very much distraught, the parents resorted to beatings to discipline him, but they were of no avail

"His mental age is about eight years (I Q 60) Emotionally he is very unstable, often he unaccountably bursts into tears The most striking aspects of his behavior are his uncontrolled impulsive cruelties and his perverted craving to suffer pain himself Like the rest of us, he wants love and affection, but he seeks it in a strange way He torments and hurts others so they may do the same to him He appears to derive an erotic pleasure from the pain which he provokes from others in lieu of love To such injuries he adds those which he inflicts upon himself

"This is a strange boy indeed His disordered behavior is the consequence of an inflammatory illness of the brain, encephalitis, which complicated a contagious disease in infancy Harold can be helped, but not cured" (Menninger[59], pp. 41-42)

Treatment and prognosis. The prognosis in epidemic encephalitis is essentially unfavorable as far as neurological aftereffects are concerned The damage is irreparable, and about all that can be done is to alleviate the symptoms by the use of drugs to relieve the muscular rigidity and reduce tremors and restlessness Encephalitic children frequently

make satisfactory institutional adjustments. The full possibilities of specialized training and education are still largely unexplored, but with such specialized procedures one third or more of these children recover to the extent that they can resume their places in society (Bond and Smith[6]).

EPIDEMIC CEREBROSPINAL MENINGITIS

Although there were outbreaks of this disease in Europe during the nineteenth century, it is relatively rare in the United States and considerably less than 1 per cent of all first admissions to mental hospitals are so diagnosed at present. It has been estimated, however, that 2 per cent of the institutionalized cases of mental deficiency are attributable to meningitis in early childhood (Klein[45]).

The disease is caused by a micro-organism which attacks and causes an inflammation of the meninges, or membranes covering the brain cortex. As in the case of encephalitis, this infectious process may give rise to a variety of physical and psychological symptoms. Among the more common effects in adults are undue fatigue, muscular weakness, blurring of vision and photophobia, and impaired appetite and sleep (Rosanoff[75]).

The pre-illness personality of the patient seems to be the most important factor in determining the nature of the personality disorders which may appear. Only where the disease serves to precipitate a neurosis or a psychosis in an already predisposed individual are the psychological symptoms of great significance. However, the results of the disease may be more serious in the case of children, where, as we have seen, damage to the brain may affect development of mental capacity.

DISORDERS WITH BRAIN TUMORS

In the writings of Felix Plater[67] (1536-1614) we find the following rather remarkable account of "A Case of Stupor due to a Tumour in the Brain, Circular like a Gland".

"Caspar Bone Curtius, a noble knight, began to show signs of 'mental alienation' which continued through a period of two years until at last he became quite stupefied, did not act rationally, did not take food unless forced to do so, nor did he go to bed unless compelled, at table he just lay on his arms and went to sleep, he did not speak when questioned even when admonished, and if he did it was useless. Pituita dropped from his nose copiously and frequently. this condition continued for about six months, and finally he died . . . At the post mortem when the skull was opened and the lobes of the brain separated, a remarkable globular tumor was found on the upper surface of the Corpus Callosum, resembling a gland fleshly, hard and fungus-like, about the size of a medium sized apple, invested with its own membranes and having its own veins, lying free and without any connection with the brain itself . . . This tumour, by its mass, produced pressure on the brain and its vessels, which causes stupor, torpor, and finally death. Some doctors who had seen this case earlier attributed it to sorcery, others just to the humors, but by opening the skull we made clear the abstruse and hidden cause."

A tumor is a new growth involving an abnormal enlargement of body tissue. Such tumors or new growths are most apt to occur in the breast, the uterus, the prostate, and the intestinal tract, although they are not uncommonly found in the central nervous system. In adults brain tumors occur with the greatest frequency in the forties and fifties (Weisz[92]). Some of these tumors are malignant in that they destroy the tissue in which they arise; others are not destructive except by reason of the pressure that they exert. Since the skull is an unyielding container, a relatively small tumor in the brain may cause marked pressure symptoms and interfere seriously with normal brain functioning.

Autopsies in general and mental hospitals have revealed brain tumors in from 1 7 to 2 per cent of the cases studied (Wilson[96]) Yet, psychoses associated with brain tumors constitute less than 0 2 per cent of all first admissions to mental hospitals. The discrepancy between the large number of people who have brain tumors and the small number showing up in psychiatric records probably reflects the fact that brain-tumor cases are often detected by physicians, given the appropriate surgical treatment, and spared the necessity of institutionalization.

SYMPTOMS AND DYNAMICS

The clinical picture which develops in cases of brain tumor is extremely varied and is largely determined by (1) the location, size, and rapidity of growth of the tumor, and (2) the pre-morbid personality of the patient

Compression of frontal lobe by a tumor A tumor may affect the brain either by pressure on all the surrounding area, or, if unencapsulated, by actual erosion of healthy brain tissue in addition to the pressure

Courtesy of Dr Olkon[63] and Dr Hassin



Sooner or later most brain-tumor patients manifest some symptoms of mental disorder In many patients these manifestations appear only as defects in gross intellectual functions, resulting from the brain damage Other patients, however, develop neurotic or psychotic patterns as well, which usually come to center around depressive, hypochondriacal, or expansive reactions

The brain tumor itself may result in both localized and general symptoms Damage to a particular part of the brain may result in localized symptoms such as disturbances of the reflexes or of specific sensory or motor functions General symptoms appear when the tumor becomes large enough to result in greatly increased intracranial pressure Typical early symptoms here are persistent headache, memory impairment or confusion, drowsiness, and "choked disc"—a phenomenon due to swelling of the optic nerve when cerebrospinal fluid is forced into it by intracranial pressure Unless this condition is corrected, vision is impaired Early symptoms also may include depression, irritability, poor attention, and a tendency to apathy and lethargy.

As the tumor progresses and the intracranial pressure increases, there may be clouding of consciousness, disorientation for time and place, carelessness in personal habits, irritability, convulsive seizures, hallucinations, apathy, and a general impairment of intellectual functions Terminal stages are similar to other types of severe brain damage, in which the patient is reduced to a vegetative stupor and eventual death

The typical symptom picture in brain-tumor cases has been clarified by Levin[52], in an intensive study of 22 cases admitted to the Boston Psychopathic Hospital between 1938 and 1946 These patients ranged in age from 22 to 65 years, the majority (73 per cent) falling between the ages of 40 and 60 years There were 11 males and 11 females Levin's findings with regard to both first symptoms and those developing thereafter prior to hospitalization are summarized in the charts on the next page.

First symptoms or signs	Number of cases
Depression	5
Seizures	5
Complaints of visual impairment	4
Headaches	2
Irritability	2
Drowsiness	2
Syncopal attacks (fainting)	1
Memory impairment	1

n the interval following the first appearance of symptoms and prior to hospitalization the ange of symptoms may broaden considerably:

Symptoms prior to hospitalization	Number of cases
Memory impairment or confusion	13
Depression	9
Seizures	8
Headaches	8
Complaints of visual impairment	6
Drowsiness	6
Irritability	6
Indifference	5
Restlessness	4
Complaint of generalized weakness	4
Loss of sense of responsibility	3
Syncopal attacks	2
Paranoid ideas	2
Fearfulness	2
Tendency to be combative	2
Euphoria	2
Aphasia	2
Hypochondriacal tendencies	2

The interval between the onset of the symptoms and hospitalization varied from 1 week to 6 years with an average interval of 17 months In most cases symptoms were evident 5 months or longer prior to admission

The patient's emotional reaction to the organic damage and to the resulting intellectual impairment depends to a large extent upon his pre-morbid personality and his degree of insight into his condition Initially the patient may merely be overly irritable, drowsy, and mildly depressed. As the disorder progresses, however, he may have some insight into the seriousness of his condition and become severely depressed, anxious, and apprehensive.

Patients who have less insight into their condition usually react to the brain damage and their failing functions by becoming expansive and euphoric Such patients seem unconcerned about their illness and may joke and laugh in a most unrestrained and hilarious manner Such reactions are apparently compensatory and are particularly apt to occur in the final stages of the disorder when there is considerable brain damage or intracranial pressure

A considerable amount of research has been done in an attempt to relate the location of the brain tumor to the resulting psychological symptoms In frontal-lobe tumors the patient is presumably most prone to silliness, jocularity, and punning and to reactions of a general euphoric nature. Epileptiform seizures of a grand-mal type are also commonly found in frontal-lobe tumors.

Tumors involving the special sensory areas in the brain may result in hallucinations of sight, hearing, taste, and smell It has been estimated that about one half of the patients with brain tumors evidence hallucinations some time during the course of their illness Visual hallucinations predominate and may involve dazzling, vividly colored flashes of light, as well as various kinds and sizes of animals and other objects In temporal-lobe tumors "Lilliputian hallucinations" are sometimes found in which the patient sees small figures that he usually knows are not real Such hallucinations apparently result from irritation of the visual pathways passing through the temporal lobe

Similarly, irritation of the olfactory pathways may result in the perception of peculiar odors, such as rubber burning, for which there is no external stimulus Auditory hallucinations may include buzzing, ringing, bells, roaring, and occasionally voices and conversations

The following excerpt from the case history

of a 66-year-old brain-tumor patient illustrates the typical symptom picture.

"It had been noted by the family that the patient had been deteriorating mentally during the preceding three months He had shown failing memory for recent events, although remote memory was fairly well maintained It was also noted that the patient was euphoric and unduly facetious, and on occasions he had shown abnormal irritability, losing his temper in minor situations which ordinarily would not have caused him to be irritable He had become careless of his personal appearance and slovenly in his eating habits, on many occasions spilling food on his person He had shown incontinence of bladder and on two occasions incontinence of feces Difficulty in walking had developed, the patient walking with an ataxic spastic gait" (McIntyre and McIntyre[57], p 722)

But although this symptom picture is so common in brain-tumor cases that it has in the past been attributed directly to the tumor, we now realize that these symptoms are neither inevitable nor to be thought of as due solely to the tumor. We have stressed repeatedly that adjustive reactions must always be thought of as a function of both the stress situation (including biological, psychological, and sociological stresses) and the personality of the individual—his stability and level of stress tolerance The greater an individual's maturity and stability, the greater the stresses which he can successfully withstand. Nowhere is this more clearly brought out than in the tremendous range of reactions which we see in patients suffering from definite, observable, measurable stress in the form of brain pathology.

A most dramatic example of the importance of the patient's pre-illness personality in determining the effects of brain pathology is related by John Gunther[28] in a story of his son Johnny's refusal to give in to a brain tumor

Johnny was sixteen and in his junior year at preparatory school when the tumor was discovered. There had been none of the common warning signs of dizziness, vomiting, chills, tremors, or double vision. A stiff neck led to examination and eventual diagnosis of tumor. An operation was performed immediately, at which time it was discovered that the tumor was in the right occipital parietal lobe and was about the size of an orange. It was not encapsulated and only about half of it could be removed The skull was left open, so that if the tumor continued to grow, the pressure would be outward rather than inward against the brain. X-ray treatments were begun Throughout this ordeal Johnny remained cheerful, belittling his discomfort and increasing weakness and trying to ease his parents' worry He was concerned about the school work he was missing and scrupulously followed the doctors' orders in the minutest detail in an effort to hasten his recovery His courage and good humor continued through the course of exhausting X-ray treatments, though he later confided that he had been so worried about them that he had been unable to sleep at night

About a month after the operation he was allowed to leave the hospital and spent a busy summer studying, working in his laboratory-workshop, calculating the mathematical odds in poker, making barbecues, and playing with his boat, between trips to the hospital for check-ups every ten days and for care in successive crises He invited several school friends to visit him, but feared that his inability to join them in active sports was spoiling their fun. He also showed great concern over the inconvenience and burden of expense he was causing his parents

The tumor began growing again very soon and was diagnosed as a fatal malignant glioma By this time his field of vision had become considerably restricted

Other types of treatment were tried, with some success first, intravenous injections of mustard gas, which is a poison that kills cells with abnormally fast growth, and which had never before been attempted in a brain case Johnny felt stronger, and in August, with the help of a friend, he successfully worked out a new process for the liquefaction of ammonia, following an

experiment he had designed in theory Johnny was confident that he would be able to return to school

The end of August he was worse again. He was very weak, his white blood count was below 1000, and there were capillary breakdowns resulting in huge bruises on chest and arms A special fatless and saltless diet was tried, supplemented by over thirty pills daily to supply needed minerals and vitamins Again his condition improved, although by this time his visual field was so limited that he could not see the whole chess board at one glance, and he could hardly move the fingers of his left hand or walk without swaying

Realizing that he could not return to school that fall, Johnny set out to make up the work by tutoring Two tutors were called in and Johnny carefully mapped out his course of study He knew exactly what he wanted to cover in each session Before long he insisted on taking a test for which his tutor thought he was not ready, and successfully passed it

Shortly thereafter, an abscess developed and Johnny became tired and feverish until the abscess opened spontaneously and was successfully drained Following this, there were several months of definite improvement Johnny worked tirelessly, determined to catch up with his class and pass college entrance exams Although he began to have attacks of amnesia and the tumor began to grow again, he caught up in one course after another—with grades in the 90's—and in mid-April took the college board exams, a six-hour ordeal following an hour of standing in line.

By the end of April the tumor, now diagnosed as glioma multiforme, was growing so rapidly that a second major operation was necessary. This time the surgeon penetrated 11 centimeters without even reaching healthy brain tissue Two weeks later Johnny went home, feeling a little better and able to joke with his family and friends. He refused to admit that it was becoming increasingly hard for him to fix his belt and shoelaces Walking was very difficult.

Late in May he graduated with his class, walking very slowly down the center of the long aisle and grasping the diploma in his weak left hand despite the efforts of the president of the board to place it in his right Less than a month after this summation of his long struggle, there was a cerebral hemorrhage, and Johnny died, without pain or fear. All through those fourteen months he had never lost his sweetness, selflessness, courage, or humor

TREATMENT AND PROGNOSIS

Treatment of brain-tumor cases is primarily a surgical matter and thus is outside the scope of our present discussion However, it may be noted that the degree of recovery of the patient in such cases depends both upon the size and location of the growth and on the amount of brain tissue which may have to be removed with the tumor In some cases there seems to be full recovery while in others there may be a residue of symptoms such as partial paralysis and a reduction in intellectual level Where tumors are well advanced and require extensive surgery, the mortality rate is high

The following case, summarized from a report by Brickner[0], reveals a postoperative reduction in general intellectual capacity and the overcompensatory reaction of the patient to his changed life situation

The patient was a man of 40 who had been a successful broker on the New York Stock Exchange. During the operation to remove his tumor, large portions of the frontal lobes of the brain were removed on both sides

As a result the patient's general adjustive capacities—including comprehension, judgment, restraint, memory, and learning capacity—were markedly lowered.

Much of his behavior was childish and abusive in nature He would refuse to wash his face in the morning or to get undressed in the evening On occasion he would walk into a room where a card game was going on and would say, "You're all a lousy bunch of players Do you want to start something?"

The following exerpts from Brickner's exten-

sive case record on this man will serve to show his impaired intellectual capacity and his grandiose overcompensating reaction

"B What kind of murderers should be executed?

A A man who will hold you up A man who will come in your room and try to steal something, or a man who is antagonistic in some way to you or to anybody else These people are better out of the way

B How about kidnappers?

A Well, I don't think execution is good enough for them.

B What would you do to them?

A Send them to jail for life.

B. Do you think that that is worse?

A. Yes

B Would you torture them?

A. No, because I don't believe in inflicting pains on a person for something he didn't realize he is doing

B. Doesn't a kidnapper know what he is doing?

A Certainly

B. Then how does your argument hold?

A I don't believe any man should be tortured

B Why not?

A. Because I don't think it is a fair way of treating a person

B I'd like to know your logic about it.

A I think it is too good a way of punishing a man

B What is?

A Torturing

B. Do you think that jail for life is better than torturing?

A. No, not better, but one way of fulfilling certain duties that must be fulfilled.

B Your aim is to make the man suffer? That is why you won't execute him?

A I don't think there is anything worse than for a man to be in jail and know he was going to be there for life"

(pp. 146-147)

"B One thing your illness lost you is the knowledge that you're not perfect.

A It's a damned good thing to lose

B Do you really believe in your heart that you are perfect?

A Yes Of course we all have faults I have faults like everyone else

B Name some of your faults

A I don't think I have any

B You just said you had

A. Well, they wouldn't *predominate* on the Exchange

B. I mean personal faults

A Yes, I have personal faults. I never give a man an opportunity to do what he wants to do on the Exchange, if I know it

B Is that a fault?

A That's being a good broker

B Can you name a personal fault? Do you really believe you're perfect?

A You bet I do—pretty near perfect—they don't come much more perfect than I am"

(pp 47-48)

Ordinarily the prognosis in brain-tumor cases depends to a large extent upon how early and how accurately the condition is diagnosed and the necessary surgery performed Unfortunately, many cases of benign (non-cancerous) tumors never produce the classical picture of choked disc, vomiting, headache, and convulsions, and for this reason diagnosis and treatment are often delayed This makes many benign tumors bad risks from the standpoint of surgical mortality and postoperative neurological impairment, because by the time surgery is performed the tumor may go very deep However, in his series of 97 benign-tumor cases, Greenwood[27] reports that 75 per cent of them made a satisfactory postoperative adjustment. Frequently an early diagnosis of brain tumor can be made from a combination of encephalographic and other neurological findings Psychological tests too are being used increasingly in such diagnostic procedures

Certain types of tumors are recurrent, and

the prognosis in such cases is of course unfavorable from a long-range point of view Still other tumors cannot be surgically removed or otherwise alleviated, and the patient ordinarily dies within a few months, or at most, years. Unfortunately, at the present time there are no known measures for preventing the development of brain tumors.

PSYCHOSES ASSOCIATED WITH HEAD INJURY

Since ancient times, brain injuries have provided a rich source of material for medical and popular speculation concerning mental functions. Hippocrates pointed out that injuries to the head could cause sensory and motor disorders, and Galen included head injuries among the major causes of mental disorders

Perhaps the most famous historical case is the celebrated American crowbar case reported by Dr Harlow[30] in 1862 Since it is of both historical and descriptive significance, it merits a few details

"The accident occurred in Cavendish, Vt on the line of the Rutland and Burlington Railroad, at that time being built, on the 13th of September, 1848, and was occasioned by the premature explosion of a blast, when this iron, known to blasters as a tamping iron, and which I now show you, was shot through the face and head.

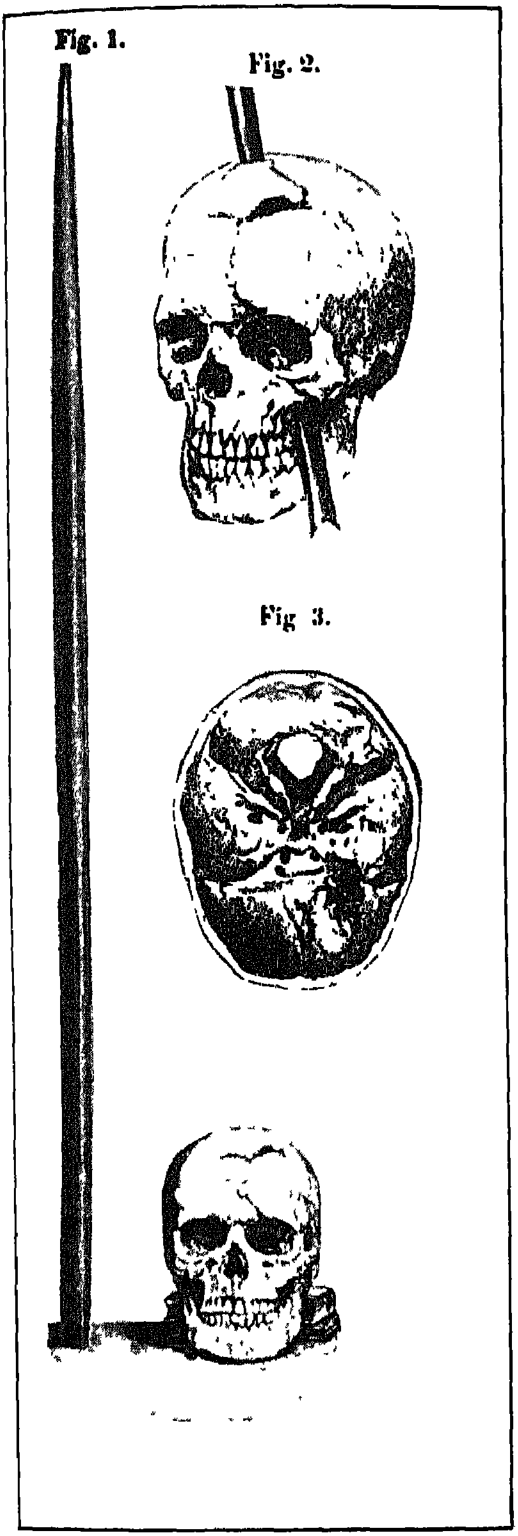
"The subject of it was Phineas P Gage, a perfectly healthy, strong and active young man, twenty-five years of age . . Gage was foreman of a gang of men employed in excavating rock, for the road way .

"The missile entered by its pointed end, the left side of the face, immediately anterior to the angle of the lower jaw, and passing obliquely upwards, and obliquely backwards, emerged in the median line, at the back part of the frontal bone, near the coronal suture The iron which thus traversed the head, is round and rendered comparatively smooth by use, and is three feet seven inches in length, one and one-fourth inches in its largest diameter, and weighs thirteen and one fourth pounds The end which entered first is pointed, the taper being about twelve inches long, and the diameter of the point one fourth of an inch

"The patient was thrown upon his back by the explosion, and gave a few convulsive motions of the extremities, but spoke in a few minutes His men (with whom he was a great favorite) took him in their arms and carried him to the road, only a few rods distant, and put him into an ox cart, in which he rode, supported in a sitting posture, fully three quarters of a mile to his hotel He got out of the cart himself, with a little assistance from his men, and an hour afterwards (with what I could aid him by taking hold of his left arm) walked up a long flight of stairs, and got upon the bed in the room where he was dressed. He seemed perfectly conscious, but was becoming exhausted from the hemorrhage, which by this time, was quite profuse, the blood pouring from the lacerated sinus in the top of his head, and also finding its way into the stomach, which ejected it as often as every fifteen or twenty minutes He bore his sufferings with firmness, and directed my attention to the hole in his cheek, saying, 'the iron entered there and passed through my head'" (pp. 330, 331, 332)

Some time later Dr Harlow made the following report

"His physical health is good, and I am inclined to say that he has recovered Has no pain in head, but says it has a queer feeling which he is not able to describe Applied for his situation as foreman, but is undecided whether to work or travel His contractors, who regarded him as the most efficient and capable foreman in their employ previous to his injury considered the change in his mind so marked that they could not give him his place again The equilibrium or balance, so to speak, between his intellectual faculties and animal propensities, seems to have been destroyed He is fitful, irreverent, indulg-



ing at times in the grossest profanity (which was not previously his custom), manifesting but little deference for his fellows, impatient of restraint or advice when it conflicts with his desires, at times pertinaciously obstinate, yet capricious and vacillating, devising many plans of future operations, which are no sooner arranged than they are abandoned in turn for others appearing more feasible A child in his intellectual capacity and manifestations, he has the animal passions of a strong man Previous to his injury, though untrained in the schools, he possessed a well-balanced mind, and was looked upon by those who knew him as a shrewd, smart business man, very energetic and persistent in executing all of his plans of operation In this regard his mind is radically changed, so decidedly that his friends and acquaintances said he was 'no longer Gage' " (pp 339-340)

Such changes in personality following frontal-lobe damage have been noted by laymen as well as doctors In his book *Arctic Adventure,* Freuchen describes an old Eskimo, Agpaleq, whose gun exploded in his hand while he was shooting caribou and resulted in extensive destruction of the brain The left frontal lobe was badly shattered in the accident and about a cupful of brain matter was lost

"They cleaned out more with a spoon, after which Alequisaq sewed the skin together Agpaleq's recovery was slow, but almost complete The accident resulted in peculiarity of habits rather than invalidism During the remainder of his life he could sleep for a week or more at a time, and remain awake an equal

Harlow illustrated his famous crowbar case by these drawings, showing (1) the comparative sizes of the cranium and the tamping iron which passed through it, (2) a view of the cranium showing just where the iron passed through, and also a large section of the skull which was entirely torn away and later replaced, and (3) an upward view from inside the skull, giving the position and relative size of the hole that was made and showing a deposit of new bone partially closing it over

length of time When asleep, it was almost impossible for him to be awakened, and it became quite the custom for his neighbors to walk into his house and help themselves to whatever they might desire, including his wife. Agpaleq slept soundly through it all and never knew what practical jokes were played on him

"He also became almost unbearably dirty, soiled himself and never cared. Prior to the accident he had been neat and clean, but afterward he was always smeared with grease or blood or both His hands were filthy, his toes rotted away and filled the house with the most noisome stench He could still hunt in his kayak, for he retained his heels and half of his feet, and was useful until the time of his death" (Freuchen[24], p 57)

Head injuries are of frequent occurrence in modern life, particularly as a result of falls, blows, and automobile and other accidents Not infrequently bullets or other objects actually penetrate the cranium Yet few patients with brain injuries find their way into mental hospitals Only some 0 4 per cent of all first admissions to mental hospitals belong to this category This is due to the fact that most brain injuries, even when they result in a temporary loss of consciousness, are relatively minor and clear up rapidly without bringing on psychotic symptoms

It is pertinent to point out here that most of us have received a blow on the head at one time or another, and in giving the case history of a mental patient, relatives often remember some such incident to which they attribute his difficulties. Patients, too, are apt to search their own childhood for evidence of having fallen on their heads or having been hit on the head. Apparently, blaming the alleged head injury for the difficulties is a convenient method of escaping the "disgrace" of a functional mental illness, and at the same time avoiding any hereditary stigma to the family. Consequently, it may be emphasized that only when the brain injury is very severe is it apt to leave any residual handicapping symptoms

GENERAL SYMPTOMS AND DYNAMICS

The symptoms which occur at the time of the head injury are called *acute traumatic disorders*, those which develop and persist thereafter but are traceable to the injury are known as chronic or *post-traumatic disorders* *

Acute traumatic disorders. Fortunately, the brain is an extraordinarily well-protected organ, but even so, a hard blow on the head may result in a skull fracture in which portions of bone press upon or are driven into the brain tissue. Even without a fracture, the force of the blow may result in small, pinpoint hemorrhages throughout the brain or in the rupturing of larger blood vessels in the brain. The immediate symptoms resulting from the brain injury depend largely upon the nature and severity of the injury (Brock[10]).

1. *Cerebral concussion* involves a mild head injury which disrupts circulatory and other brain functions and results in a slight clouding or momentary loss of consciousness, slight confusion and disorientation, and emotional changes involving irritability or euphoria Severe psychological symptoms rarely occur here, and the patient usually makes a rapid recovery within a few hours or days, with partial or total amnesia for the event. This simple concussion syndrome is illustrated in the case of a football star who was knocked out in a head-on collision with an opposing player He regained consciousness while being carried off the field but was disoriented and confused and called signals as if he were still in the game About an hour after his arrival at the hospital, the mental confusion cleared up and he seemed normal except for complaints of a terrible headache.

2. *Cerebral contusion* may occur if violence to the head is so severe that the brain, normally anchored in a fixed position, is shifted within the skull and is pushed or compressed

* The word *trauma* here refers to a physical wound or injury We have previously used the term in Chapter 5 to refer to psychological wounds or shocks This need not be confusing if we remember that stress may be biological or psychological

against the opposite side. In this sudden movement of the brain there may be an actual bruising of the surface of the brain against the cranium. Here, in addition to the symptoms characteristic of concussion, there may be prolonged unconsciousness for hours or even days, followed by a train of more serious symptoms including prolonged and severe headaches, dizziness, nausea, weakness, restlessness, and in some cases delirium. Even though these symptoms may, in the main, clear up in a few days or weeks, there may be a residue of nervous symptoms such as irritability which persist for a prolonged period of time

Cerebral contusion is illustrated by the following case of a flier who was injured during a crash landing of his plane

When taken to the hospital he was unconscious Some eight hours after the accident he returned to consciousness but was confused and mildly delirious There was a gradual return to clarity over a period of the next two days, accompanied by complaints of headache, dizziness, and nausea, especially if he moved He was also hypersensitive to noise and light He was able to leave the hospital within a week but complained for several months of headaches and inability to tolerate noise

3 *Cerebral laceration* is an actual rupture or tearing of the brain tissue. This often results in skull-fracture cases when a portion of the bone is driven into the brain tissue. It may also result from injury by bullets or other objects which actually penetrate the cranium or from the internal laceration of the brain, as, for example, in cases of severe contusion.

The immediate general symptoms of cerebral laceration are similar to those in contusion " unconsciousness followed by confusion and a gradual return to clarity. When the patient becomes conscious, he will usually complain of headaches and sensitivity to noise and to lights, and movements will induce dizziness, nausea and vomiting For days this patient will be acutely ill, feverish, perspiring, and have a slow (or rapid) pulse Mentally he will pass through several stages from deep coma to clarity During this transition he may become delirious, disoriented as to time and place, hearing voices, fearful of danger, trying to get away from harm, or he may be eager to resume his work" (Fetterman[28], pp. 303-304) In such cases there is usually a residue of intellectual impairment and of motor control which remains after the acute symptoms have cleared up This has been illustrated in the crowbar case reported by Dr Harlow, quoted on page 326. The severity of this residual impairment will, of course, depend upon the nature and extent of the cerebral damage

"L B was shot through the left side of the head and he fell unconscious. He awoke 12 hours later, unable to remember what had happened, his head throbbing, his mind confused, and his right arm and leg paralyzed. He tried to speak but could utter only a few sounds and no words X-rays of the skull and special tests revealed that a bullet had penetrated the skull, damaging the left lower frontal convolutions of the brain

"Two months had elapsed before I saw this man. He had improved considerably He had regained power in the paralyzed arm and leg, so that he walked quite well, except for a slight limp, and there was still a moderate loss of skill in his right hand He possessed power in the arm and forearm, but had not regained the finer, precise movements of his fingers A more serious handicap was the loss of speech He was unable to express what he wanted to say Again and again he would struggle to find a word and would become red in the face when words failed to express his thoughts He would start to talk, repeat the same word, remain blank, mispronounce a common word, repeat it and then give up, exasperated He could understand what was said to him and could read and write, yet the faculty of expressing his ideas clearly in well pronounced words was severely damaged (motor aphasia). This defect was little improved in the two months which had

elapsed and might persist as a chronic loss" (Fetterman[23], pp 305-306)

Some degree of bleeding, or *intracerebral hemorrhage,* occurs in most severe head injuries These hemorrhages may involve large areas of the brain or they may be restricted to one particular area When the hemorrhaging involves small spots of bleeding—often microscopic sleeves of red cells encircling tiny blood vessels—the condition is referred to as *petechial hemorrhages.* There is some evidence of petechial hemorrhages in most brain injuries, but in fatal cases they are usually multiple or generalized throughout the brain Prize fighters who are knocked unconscious by head blows and remain unconscious for several hours usually suffer such petechial hemorrhaging If a fighter is knocked out in several consecutive bouts, he may develop a form of encephalopathy (area or areas of permanently damaged brain tissue) from the accumulated damage of such injuries As a result, he may suffer from inability to concentrate, impaired memory, involuntary movements, and other symptoms—a condition popularly referred to as being "punch drunk"

In head injuries involving severe contusion or laceration there is usually gross bleeding or hemorrhaging at the site of the damage. Most commonly this gross hemorrhaging involves the frontal and temporal lobes of the brain. Where the hemorrhaging is extensive, the patient may of course die

In these severe cerebral-injury cases, there is *coma* in which all consciousness is blotted out; pulse, temperature, and blood pressure are affected, and the patient's survival is uncertain The duration of the coma is primarily determined by the extent of the injury. In severe cases the patient may be unconscious for days or even weeks If the patient survives, the coma is usually followed by delirium in which he may manifest acute excitement and confusion, disorientation, hallucinations, and generally anxious, restless, and noisy activity Often he talks incessantly in a disconnected fashion, with no insight into his disturbed condition Gradually, over a period of weeks or months, the sensory symptoms clear up and the patient regains his contact with reality, although a residue of mental and motor impairment is left The following case well illustrates both focal and general symptomatology in severe injury

"C S —— was a passenger in a jeep traveling along the road when there was a violent collision He was picked up, bruised, bleeding and unconscious At the hospital he was critically ill, his pulse slow, the right side of his body weak For several days he remained in a coma The symptoms grew worse, so that there was reason to suspect a clot on the brain The neurosurgeon explored the surface of the brain, but instead of a single clot pressing on the brain, he found numerous tiny, discolored areas As the corporal recovered from his coma, he was confused and bewildered ('How did I get here? I am home, yes, this is home . . . Who is this lady [wife]? It is someone I knew She is a beaut . I just came home from school . Yesterday I was boating') The corporal did not recall any accident and did not know where he was When introduced to his wife, he finally recognized her, but an hour later could not remember her visit One day he became delirious, smelled burning odors in the room and insisted that the mattress was on fire He was fearful about food, suspecting poisoning For the most part he was apathetic and paid no heed to the activities in the ward He ignored a newspaper, he was unable to read and unable to comprehend words He had trouble with vision and could not tell time His speech was affected, so that he would repeat the same phrase again and again 'Who is the lady who visited you?' he was asked His answer was, 'She is a killer-diller, a killer-diller, a killer-diller' (a pet name for his wife) He would relate experiences that he had just completed (confabulations), made up of past events, wishes and imagination, such as 'I just came back from fishing in a beautiful yacht—just got in'

". . . Gradually in a period of two months, the patient acquired a better grasp of contacts and became more alert, but was seriously handicapped by defects of motor control and thinking" (Fetterman[28], pp 304-305)

Although many patients make a remarkably good recovery, even after severe brain injury, others show various residual symptoms. Goldstein[25] has reported that patients with frontal-lobe lesions tend to rigid facial expressions, a minimum of expressive movements, and slowness and dullness. Patients suffering with sensory aphasia caused by injury to the parietal lobe are prone to undue optimism and euphoria, according to Schilder[79].

Chronic or post-concussion disorders. The preceding case history of C S described one of the common patterns of residual symptoms If the patient survives the brain damage, a variety of psychological and physical symptoms may ensue which are directly traceable to it In general, the more severe the brain damage the more pronounced are the residual symptoms Some of the more important physical symptoms include headaches, easy fatigability, impairment of memory, difficulty in concentration and thinking, paralysis, and convulsive seizures According to Bennet[4], about 10 per cent of head-injury cases develop traumatic epilepsy within two years.

Where the brain damage is extensive, the patient's general intellectual level may be markedly reduced In addition, various specific neurological and psychological defects may follow localized brain damage Occipital-lobe injuries may impair vision, parietal-lobe injuries may result in sensory aphasia, and so on Although many patients make a remarkably good recovery, even after severe brain injury, others show various personality trends of a deteriorative nature referred to as the *post-concussion syndrome* or as a *post-traumatic personality disorder* The symptoms were well brought out in the historic cases of Phineas Gage and Agpaleq. Typically they involve a lowering of self-control and ethical restraints, increased irritability, lack of initiative, childishness, petulance, and a general impairment of judgment and intellectual functioning.

In some cases the post-traumatic clinical picture is characterized by disorientation for time and place, markedly impaired memory for recent events, retrograde amnesia (loss of memory for events just preceding the time of the patient's accident), and confabulation, in which the patient fills in gaps of memory with what he considers plausible events, rather than admit he cannot remember. Five minutes after breakfast the patient may not be able to remember what he had to eat. Despite his best efforts he cannot remember the name of a person to whom he has just been introduced This clinical picture is referred to as the *Korsakoff syndrome*, or as the *amnesic-confabulatory syndrome*

In children, such post-traumatic personality disorders are often somewhat similar to those following encephalitis. There may be a variety of antisocial tendencies such as disobedience, destructiveness, aggressiveness, cruelty, sexual deviations, stealing, and lying

Post-traumatic personality changes are often difficult to evaluate in terms of the actual role of the organic brain injury There are no well-defined criteria to indicate the extent to which such personality changes are caused directly by the brain injury and the extent to which they represent secondary reactions of the personality to the injury An analysis of the pre-traumatic personality of the patient often sheds considerable light on the post-traumatic personality changes (Merritt[61]). In the observation of 500 cases of cranio-cerebral injury evacuated to an army neurologic center, Aita and Reitan[1] found that in the few cases where psychosis developed, the brain injury played a secondary role, serving merely as an aggravating factor.

Although symptoms resulting directly from brain damage are quite different from typical neurotic and psychotic patterns, there are

many cases in which head injuries serve to precipitate a neurosis or psychosis which is primarily a functional one Here the actual extent of the brain injury is usually minor, and the pre-traumatic personality of the patient is the primary factor Any of the typical neurotic or psychotic patterns may appear Often, fear, associated with the injury, seems to be the primary precipitating factor.

TREATMENT AND PROGNOSIS

Immediate treatment for brain damage is primarily a medical matter and does not concern the psychologist in detail, except in so far as prompt treatment may prevent further injury. Where either diagnostic or treatment procedures are handled in an atmosphere which tends to amplify the severity and mystery of the illness, the patient is apt to get the impression that he is terribly ill, that the doctors cannot do much for him, and that there is only slender hope for him An atmosphere radiating assurance and confidence is considered much more beneficial for the eventual outcome in cases of brain injury. Often supplemental psychotherapy will assist the patient in reacting adequately to his injury and to the changes in his life situation.

In severe cases immediate medical treatment may have to be supplemented by long-range re-education and rehabilitation although some patients are so impaired intellectually that they cannot ever adjust outside of an institutional environment In less severe cases, aphasia and other special defects may have to be handled through re-education, and rehabilitation This may include preparation for acceptance of a lower level of adult occupational and social functioning Psychotherapy and other treatment aids are often of vital importance in such cases.*

Prognoses in brain-injury cases are hard to make, because they depend upon two factors which are often hard to gauge (1) the exact nature and extent of the injury, and (2) the way the patient is going to react to the injury and to any changes in his life situation.

The shorter the period of unconsciousness and the less extensive the brain injury, the more favorable the prognosis Even cases with severe brain lesions usually improve somewhat with time, possibly due to the taking over of new functions by intact areas, although the probable chronic physical aftereffects and the frequent general deterioration of psychological and emotional reactions makes the general prognosis unfavorable But here again, patients with stable, well-integrated personalities are often able to make a satisfactory adjustment, even when considerable amounts of brain tissue have been destroyed, and in cases of somewhat comparable brain injuries, the patient with the more stable pre-traumatic personality will make the better recovery (Ebaugh[20]) Where the head injury is merely a precipitating factor in the onset of a typical neurotic or psychotic reaction, the prognosis is comparable to that in other neurotic and functional psychotic disorders

Post-traumatic personality disorders without evidence of brain damage usually tend to become worse, rather than better In fact, post-traumatic complaints lasting beyond one year (aside from convulsive disorders and defects of intellectual functioning) are apt to constitute functional personality disorders rather than reflections of organic brain damage (Ruesch and Bowman[78])

Various other complicating factors may also have a direct bearing upon the outcome of brain injuries Children recover better than adults, although serious brain injury may, of course, leave the child mentally retarded. Patients who are also victims of alcoholism, drug addiction, arteriosclerosis, and a wide range of other organic conditions have an unfavorable outlook. Alcoholics in particular are prone to head injuries and other accidents and do not show good resiliency from the standpoint of recovery Severe mental conflicts or emotional excitement, hatred, fear, or guilt not only predispose an individual to ac-

* For an excellent summary of procedures in this area, the reader is referred to Zangwill[90]

cidents, but also seem to delay recovery. Particularly is this true where the invalidism temporarily protects the patient from having to face the conflicts and difficulties in his life situation in a more realistic and effective way (Ruesch and Bowman[78]).

DISORDERS ASSOCIATED WITH TOXINS AND METABOLIC DISTURBANCES

Disturbances in cerebral functions may result from several types of toxins and from a wide range of metabolic disorders including nutritive deficiencies, circulatory failures, endocrine imbalances, and so on.

TOXIC DELIRIA (PSYCHOSES)

The most common form of toxic psychosis is that of delirium accompanying infectious diseases such as diphtheria, pneumonia, and typhoid fever, although other diseases, such as uremia and pernicious anemia, extreme exhaustion, and the ingestion of various drugs, metals, and gases may also result in toxic reactions (Doty[19]). In these disorders there is usually an acute onset of the disturbance with delirium and coma.

The early symptoms of delirium usually consist of restlessness, uneasiness, and increased sensitiveness to noise and light. The patient's sleep may be troubled by frightening dreams. As the delirium progresses, consciousness becomes clouded and the patient becomes confused and disoriented for time and place. Attention and concentration are severely diminished, and the patient is unable to remember or interpret properly what he sees and hears. Although some patients become emotionally elated and euphoric, the typical emotional reaction is fear and apprehension. The fears relate especially to the misinterpretation of sounds, which the patient perceives as threatening to his safety. A footstep may be a murderer stealthily approaching to kill him.

Often the patient's repressed desires and general fears and worries are well represented in the content of his delirious wanderings. One delirious patient who was ordinarily extremely inhibited in her sexual attitudes used obscene language in her overt but confused overtures to the attending physician.

As the delirium becomes more acute, the picture becomes one of increasing confusion, apprehension, and agitation. Often there are periods of drowsiness or coma alternating with the delirium. The degree of the delirium will, of course, depend to a large extent upon the severity of the patient's illness—the degree of toxic disturbance. However, persons who have poorly integrated personalities or who are marginally adjusted may become delirious with mild fevers, whereas better-adjusted persons may be able to maintain their psychological integration even in the face of dangerous elevations in bodily temperature and other very severe illness (Romano and Engel[74]).

Unless the toxic condition is very severe or prolonged, there is usually no actual damage to the gray-matter neurones in the brain, in which case the pathology is temporary and clears up rapidly once the source is removed by medical treatment. If a "toxic psychosis" continues, as occasionally happens in a woman after childbirth, it indicates a personality which was ready to break under any additional strain. The organic stress here merely precipitates a functional disorder.

Since there are a number of internal and external toxic agents which all tend to the production of a somewhat similar picture involving delirium and coma, we shall confine our present discussion to a brief review of some of the more common types of these toxic reactions. (Toxic reactions associated with alcohol and drugs will be considered in a separate section.)

Deliria with febrile illness (fever). Influenza, pneumonia, typhoid and typhus fever,

malaria, smallpox, and scarlet fever are the diseases most apt to bring on acute delirious reactions The following case serves to illustrate the symptomatology in such reactions

"... Mrs M S—— had taken sick, with a temperature of 101° and headaches During the night, she became restless, fearing danger in her home The condition grew worse, she became sleepless, refused food, and talked in an incoherent manner She seemed to be looking for objects in bed During the initial examination at her home, she cooperated quite well but was confused about time and place It seemed to her that her thoughts and actions were being controlled by others. She would remark 'The people want me to do this They exercise a domination over me'

"The patient was hospitalized, during which time she refused all food, spitting out anything that was offered to her Tube feeding became necessary She became disoriented for time and place She believed that the hospital room was the interior of a church She 'recognized' it as a famous church in Italy where she had once traveled She misidentified persons, referring to me as her husband About ten days after onset, the temperature was 103°, the pulse 130 The patient continued to be restless, talked on and on 'You are Howard (husband's name) No, you are Dr. S. (family doctor) You are Dr S Freud You are tall, dark, and handsome' She would repeat these phrases again and again (perseveration)

"As the fever came down and the physical condition improved, there was a gradual improvement in the mental state Patient took some food and became better oriented However, some two weeks after onset, she still talked oddly 'I am an Indian chief, I do the polka barrel dance' She jumped out of bed and went through some dance steps to illustrate her remarks The condition lasted some three or four weeks and there was a complete recovery

"The patient had had no previous mental symptoms She has been seen occasionally for a period of four years following this illness and has remained mentally well" (Fetterman[23], p 248).

Exhaustion delirium. Here we find acute confusion or delirium without any infection or fever Although not common, such reactions may occur under conditions of extreme physical exertion Often there is a combination of physical exertion and starvation, as in the case of individuals who become lost in remote forest and desert areas and run out of food and water

The onset here usually includes insomnia, mild confusion, some clouding of consciousness, perplexity, vague fears, and fleeting hallucinations and delusions The individual may see and hear rescuers when none are in the vicinity, or he may see a lake of water, or tables loaded with food. Gradually his surroundings become increasingly obscure and distorted

Often the patient seems to be groping in a mental fog as he drives himself on and tries to survive Sometimes the increasing confusion may be punctuated by a period of comparative clarity in which the patient finds that he has been wandering in circles This toxic-exhaustive state may continue for several days or even weeks, but usually clears up rapidly once the patient is given proper food and rest.

Admiral Byrd's[18] record of his stay alone at the Bolling Advance Weather Base during the Antarctic winter night is a graphic and fascinating account of the thoughts and behavior of a man struggling desperately to survive in the face of cold, loneliness, monoxide poisoning, and exhaustion. The following brief excerpts are of dynamic interest.

"The next day, June 1, was a Friday A black Friday for me I awakened from a dream of horrors to find that I could hardly move. I realized that all I could reasonably hope for was to prolong my existence for a few days by hoarding my remaining strength, by doing the necessary things very slowly and with great deliberation

"My first need was warmth and food. The fire

had been out 12 hours, I had not eaten in 36 Performing every act in slow motion, I edged out of the bunk and worked into my clothes. Faintness seized me as I touched the floor, and for many minutes I sat in the chair just staring at the candle Then I gained enough strength to light the stove. The flame burned red and smoky from faulty combustion This fire was my enemy, but I could not live without it

"My thirst was the tallest tree in a forest of pain The tunnel where I cut ice to melt for water was a hundred miles away, but I started out. Soon I slipped and fell My ice quarry was too far I licked the tunnel wall until my tongue burned, and then scraped up half a bucket of dirty snow from the floor It was still a soggy mass when I tried to drink My hands were shaking and it spilled all over me Then I vomited all that I had drunk On the verge of fainting, I crawled up on my bunk to rest.

"Death had confronted me many times . Now death was a stranger sitting in a darkened room, secure in the knowledge that he would be there when I was gone.

"Great waves of fear swept through me and settled deep within

"Afterwards, lying in the sleeping bag, I tried to analyze the possibilities. For five interminable days I had been lost on a great plateau of pain where all the passes were barred I had suffered and struggled, hoped and stopped hoping Now I asked myself, What are your assets? What might be done that has not already been done?

"The first necessity was that to survive I must husband my strength Second, to avoid further poisoning, I must use the stove sparingly and the gasoline pressure lamp—my one good light—not at all And to build up my strength I must sleep and eat

"But if I depended on this routine alone, I should go mad from the hourly reminders of my own futility Something more—the will to endure these hardships—was necessary. That must come from deep inside me But how? By taking control of my thoughts and dwelling only on those which would make for peace A discordant mind, black with confusion and despair, would finish me off as thoroughly as the cold" (pp 175-190)

Lead psychosis. There is a variety of metals, such as lead, mercury, and manganese, which have fumes or dust that may be inhaled, resulting in toxic reactions.

Although relatively rare today, lead poisoning has long been an occupational hazard in certain trades. It usually results from prolonged exposure to lead fumes and dust Mild symptoms include fatigue, listlessness, and irritability More acute cases develop delirium, confusion, anxiety, hallucinations, restlessness, insomnia, and tremors.

Lead poisoning may result in extensive cortical damage; in these cases there may be residual symptoms in the form of progressive mental deterioration Here the typical symptoms include irritability, lack of emotional control, forgetfulness, confabulation, and impaired judgment.

Carbon-monoxide poisoning. Perhaps carbon monoxide is the best known of the gases which have a toxic effect on the body This gas results from the incomplete combustion of petroleum or coal products Inhalation of carbon monoxide in large amounts interferes with the oxygen content of the blood stream, which in turn interferes with the functioning of nerve cells in the brain

In severe cases of carbon-monoxide poisoning, the patient dies from asphyxiation Where the patient recovers, the symptoms which remain depend on the degree of brain damage resulting from the poisoning and on the personality of the patient. The typical residual symptoms in severe cases are similar to those in lead poisoning and include confusion, apathy, memory impairment, loss of initiative, and general lowering of mental functions In both lead and carbon-monoxide poisoning, neurological disorders (convulsive seizures, tremors, etc) are common

The following case of accidental carbon-monoxide poisoning shows the typical symp-

toms and residual effects found in severe cases Prior to his accidental poisoning, the patient was a steady, capable, hard-working man, vitally interested in the world around him.

"The patient, a white male, 41 years old, a pearl button cutter by occupation, had retired in a moderate sized bedroom in which there was a gradual leak in an illuminating gas pipe When discovered 24 hours later, he was taken to a hospital He was described as being in a coma His pupils were dilated, and would not react to light. Respirations were labored with a rate of 50 per minute He was cyanotic, and there was visible engorgement of the veins in the neck He was unable to open his mouth. The heart rate was from 150 to 160 per minute . His abdomen was hard The extremities showed tetanic contractions from three to five minutes apart, and the deep reflexes were exaggerated

"During the following two days, there was gradual recovery Two weeks later he was sitting up, and 20 days after admission he was sent home. He had apparently recovered, and remained well until nine days later when he became irritable, did not care to dress or wash himself, refused to sit down for his meals, but ate them standing before the mantel-piece He finally became confused, abusive and violent, and was sent to the Philadelphia General Hospital An examination revealed a very clouded sensorium, tremors, athetoid movements, exaggerated deep reflexes, generalized muscular spasticity with fibrillary twitching, polyneuritis, incontinence of urine and feces, and three healed areas each two centimeters in diameter on the back of the lower right leg

"Again there was a gradual recovery during which there was found impairment of temperature perception over the lower extremities, weakness, ataxia, and adiadokokinesia These changes were more marked on the left than on the right side When asked to shake hands he would not perform the action requested despite his avowed understanding of the question asked Instead, he would touch his nose, rub his hands together or perform some other foreign movement

"Recovery continued, and 47 days after admission he was discharged Twenty-six days later, his knee jerks were still exaggerated, there were decreased power in the left upper extremity, a left digital tremor, and hypoesthesia over the fifth finger of the left hand Mentally, he seemed somewhat excited and there was memory defect with impaired judgment. No definite amnesia was demonstrable Four months later, there was apparent complete recovery with the exception of his mental state The patient lost interest in his personal appearance, lacked ambition, and had outbursts of temper during which he would swear violently contrary to his former habits He performed silly actions, indulged in alcoholic beverages, and was unable to hold a position despite his good physical condition . . . The changes observed suggest a wide-spread, generalized disturbance of the central nervous system

" . . His present lack of ambition, loss of interest in his surroundings and himself, and absence of moral tone stand in sharp contrast to his previous personality " (Borman[7], pp 135-136)

NUTRITIONAL DEFICIENCIES

Vitamin and other nutritional deficiencies such as pellagra have been shown to underlie certain types of neuropsychiatric disorders and various acute psychotic reactions associated with prolonged alcoholism (Hardwick[20], Keys, *et al.*[13]) Deficiencies in the vitamin-B complex seem to be most commonly involved.

Even slight vitamin-B deficiency in humans leads to increased irritability, moodiness, lack of cooperation, and meanness. Williams[95] and his colleagues in a very interesting experiment subjected eleven women inmates of a mental institution to a restriction of vitamin-B intake to 0.45 mg. daily Actually, this is probably little if any below that found in the diets of many American families. Within six to eight weeks the subjects began to evidence general emotional instability, including irritability, moodiness, quarrelsomeness, lack of cooperation, and vague fears progressing to agitation and depression When

thiamine was restored to their diet, these symptoms disappeared

Similar results were obtained by Brozek[12], who studied the personality changes in eight normal young men, maintained 161 days on a partially restricted intake of B-complex vitamins, followed by 23 days of acute deficiency, and 10 days of thiamine supplementation. Little or no evidence of personality change was observed during the period of partial restriction, but consistent and striking deterioration occurred during the acute deficiency The changes were in the direction of depression, loss of spontaneity, increased tension, hysteria, hypochondriasis, and general increased emotionality Adding thiamine to the diet produced rapid recovery.

Pellagra. Pellagra is considered to be a deficiency disease resulting from the absence of the so-called pellagra preventative factor (B_2) in the vitamin-B complex It is characterized by skin lesions, gastrointestinal disturbances, and a variety of mental symptoms.

However, major mental symptoms apparently occur in less than 5 per cent of all cases (Noyes[62]). In mild cases the symptom picture is often similar to that in asthenic (neurasthenic) reactions, with complaints of fatigue, insomnia, anxiety, apprehension, forgetfulness, distractibility, lack of enthusiasm, and an inability to sustain effort. In more serious form the symptoms may involve a delirious state, with confusion, disorientation, memory impairment, and hallucinations In occasional severe cases the patient may manifest manic excitement or an agitated depression, with irritability, anxiety, apprehension, and paranoid delusions.

Again the personality organization of the patient will have a marked effect both upon his ability to withstand avitaminosis and upon the type of reaction he may manifest. Typically the symptoms clear up rapidly with proper diet and nursing care

Pernicious anemia. This is a nutritional disorder in which there is a deficiency of red blood corpuscles which apparently results in defective nutrition to the brain cells. It has been estimated that some 35 per cent of patients with pernicious anemia manifest minor mental changes (Noyes[62]). These depend heavily upon the personality make-up of the patient and hence may be quite diverse. In some cases there is an acute confusional state similar to that in toxic deliria, other patients become depressed and agitated; in still other cases paranoid delusional trends may predominate in the symptom picture Occasionally there is progressive organic deterioration, with a gradual impairment of mental functions, including memory and judgment.

Treatment here depends primarily upon the clearing up of the disease itself and ordinarily involves liberal doses of liver extract. However, psychotherapy is often of importance in the overall treatment program.

ENDOCRINE DISTURBANCES

The endocrine glands manufacture chemical substances known as hormones which are essential for normal physical and psychological development and functioning Consequently, underactivity or overactivity of any endocrine gland may have marked effects upon psychological functions. However, such endocrine dysfunctions, in themselves, ordinarily lead not to mental illness but rather to emotional excitability or to other psychological conditions which lower the individual's general adjustive abilities.

Endocrine disturbances may also lead to physical anomalies which in turn contribute to adjustive difficulties. Hyperfunction of the pituitary may result in extreme growth, in which children may attain heights well above 7 feet Although the intelligence of such "giants" is not affected, their stature is apt to lead to severe adjustment problems Similarly, pituitary midgets, bearded ladies, extremely fat persons, and other endocrine "freaks" are subject to curiosity, ridicule, and other abnormal social conditions which make self-acceptance and normal personality development extremely difficult

In the following discussion of thyroid and adrenal dysfunctions, which are the most common of the endocrine disorders associated with severe psychological disturbances, it should be remembered that the endocrine system is a functional unit and that the malfunctioning of any given gland may have widespread effects on the functioning of the others. In addition, such dysfunction may vary considerably in degree and may have widely differing effects depending upon the age, sex, and general personality make-up of the individual.

Thyroid dysfunction The best understood of the endocrine glands is the thyroid, which regulates bodily metabolism. Either oversecretion or undersecretion of the thyroid hormone *thyroxin* will produce definite signs of pathology. Oversecretion (hyperthyroidism) accelerates the metabolic processes of the body and leads to loss of weight, tremors, tenseness, insomnia, and emotional excitability. Beyond this the mental symptoms that occur, and their severity, depend upon the personality make-up of the patient.

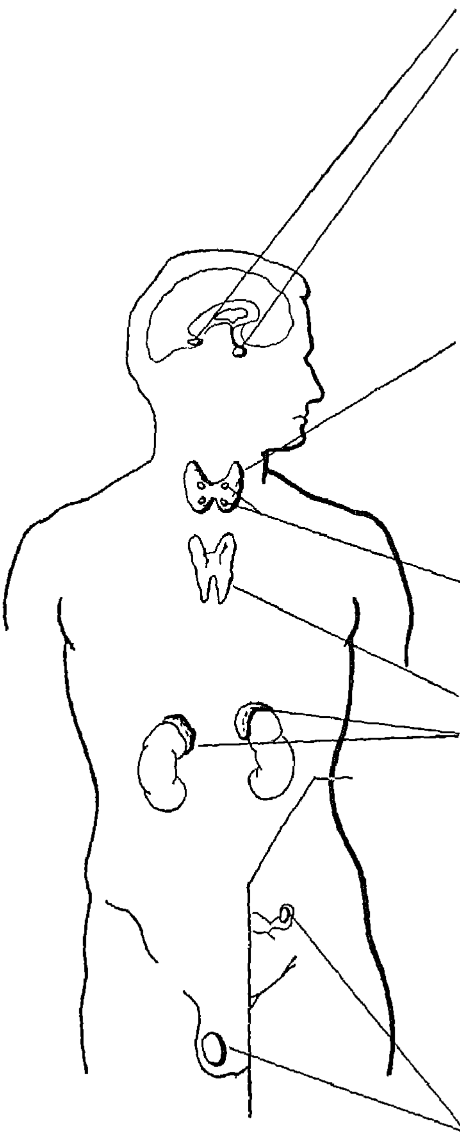
Psychotic manifestations of moderate severity have been found in about 20 per cent of hyperthyroid patients (Lidz and Whitehorn[54]). These symptoms typically include severe anxiety, apprehension, agitation, and transitory delusions and hallucinations. In the following case the disorder was diagnosed as a psychosis due to hyperthyroidism.

"... The patient has been 'nervous' for the past ten years. Within the past four years she has lost seventy pounds in weight but has been reluctant to consult a physician. She worried inordinately about her husband coming home from work late at night and often went to meet him. She began to feel that everything she did was wrong and cried on the least provocation. She complained of dizziness which became so severe that she decided to seek medical aid. The physician she consulted felt that she should go to the general hospital immediately. While there she was abnormally suspicious and thought her food was poisoned. She became so confused and overactive that it was necessary to commit her to a mental hospital. . . ." (Biddle and Van Sickel[5], p. 264)

Not only does the personality of the patient play an important role in the way he reacts to thyroid dysfunction, but emotional factors have been found to be of causative importance in the hyperthyroidism itself. Lidz and Whitehorn[54] found in their study of thyrotoxic patients that almost all of them suffered a serious emotional crisis prior to the onset of their illness. For example, they describe "a 40-year-old Negro woman who became ill shortly after the nephew she had raised as a son married and disappeared, at the same time that the eldest sister who had raised her was dying." (p. 699) Apparently the trauma which preceded the onset of the thyroid dysfunction involved a threat to cardinal interpersonal relationships. It was critical because it struck at a core weakness in the personality configuration of the patient. There is increasing evidence to indicate that in cases of hyperthyroidism patients are struggling with serious and unresolved personality difficulties which in the face of additional stress precipitate the increased functioning of the thyroid beyond normal limits. However, the precise nature of the relationship between the personality make-up of these persons, the conflicts with which they are having difficulty, and the hyperthyroidism remains to be determined by further research.

The treatment of hyperthyroid patients in the past has been almost exclusively a medical matter including such methods as (1) iodine therapy, which produces a variable degree of remission in some 95 per cent of thyrotoxic patients, (2) goitrogenic compounds, which inhibit the synthesis of thyroid hormone and thus reduce the amount of its secretion, (3) thyroidectomy, which involves the surgical removal of part of the thyroid gland itself. Although these medical approaches are effective in the majority of cases,

ABNORMALITIES ASSOCIATED WITH ENDOCRINE DYSFUNCTION



PINEAL (functions still unknown)

PITUITARY (regulates growth)

DYSFUNCTIONS

Gigantism—excessive pituitary hormone during growth period, with extreme growth to height of 7 to 9 feet. Intelligence and affect not appreciably modified

Midgetism—deficient pituitary hormone in early life, preventing normal growth, but body correctly proportioned, intelligence, affect not appreciably modified

Acromegaly—excessive pituitary hormone in adulthood, with thickening and elongating of bodily extremities, especially hands, feet, and jaw

THYROID (regulates rate of bodily metabolism)

DYSFUNCTIONS

Cretinism—thyroid deficiency in infancy, with physical and mental dwarfing, heavy features

Myxedema—thyroid deficiency in adults, with overweight, puffed physical features, general sluggishness

Exophthalmic goiter—oversecretion, with accelerated bodily metabolism, loss of weight, fine tremors, restlessness

PARATHYROID (Regulates calcium and phosphate metabolism)

DYSFUNCTIONS

Tetany—due to removal or destruction of parathyroids, with muscular twitches, tremors, cramps, convulsions

THYMUS (functions still unknown)

ADRENALS (secrete hormones making extra energy available in emergencies, approximate effect of stimulation of sympathetic nerves)

DYSFUNCTIONS:

Addison's disease—deficiency of cortin from adrenal cortex, with increased fatigability, loss of appetite, anemia, listlessness, irritability, darkening of skin

Pubertas praecox—oversecretion of adrenal cortex, with accelerated development of sex characteristics, child of six may resemble dwarfed adult with adult build, fully developed penis, husky voice, facial hair, and other characteristics of sexual maturity

Failure of adrenals—apparent breakdown and inadequate hormone secretion following prolonged physiological mobilization

GONADS (determine sex drive and development of secondary sex characteristics)

DYSFUNCTIONS:

Eunuchism—castration of male before puberty, with development of secondary sexual characteristics of female (musculature, bodily proportions, etc) Varying degrees of deficiency of gonadal hormones during childhood result in failure to develop secondary sex characteristics and lack of sexual interest and drive.

Menopause or climacteric—marked reduction of gonadal hormone production, usually during late forties, often with irritability, restlessness, hot flushes, mental depression, and insomnia.

there are many patients who show a recurrence of their hyperthyroid condition

As a result Lidz and Whitehorn[54] and other workers in the field have emphasized the importance of psychotherapy in helping these patients to achieve a more adequate personality adjustment and preventing or reducing the chances of a reoccurrence of the hyperthyroidism In fact, they conclude that it is possible that psychotherapy should be tried in many hyperthyroid cases before extreme measures such as thyroidectomy are undertaken. This would appear to be particularly important where it seems apparent that the condition has been precipitated by emotional stress.

Pronounced thyroid deficiency in adulthood (hypothyroidism) leads to a condition called *myxedema* Here metabolism is slowed down and the patient typically puts on weight, becomes sluggish in action and thought, shows memory defects for recent events, and is generally listless and sleepy Again, however, the personality of the patient seems to play an important role in determining the symptom picture and some patients show reactions very similar to those in hyperthyroidism, with nervousness, restlessness, anxiety, and irritability. Fortunately, thyroid medication is highly effective in this disorder, and together with improved methods of diagnosis, has made such hypothyroid conditions extremely rare. (The relation of mental deficiency to hypothyroidism during the prenatal period or early infancy will be taken up in Chapter 11.)

Adrenal dysfunction. The adrenals are paired glands consisting of an outer layer called the *adrenal cortex* and an inner core called the *adrenal medulla*. The adrenal cortex functions in the regulation of salt and water metabolism, in pigment metabolism, in the elaboration of steroid sex hormones, and in some aspects of carbohydrate metabolism (Gorman and Wortis[26])

Undersecretion or deficiency of the adrenal cortex results in *Addison's disease*. This disorder is characterized by a variety of metabolic disturbances, including a decrease in blood pressure, body temperature, and basal metabolism and a darkening of the skin The accompanying mental symptoms typically include lack of vigor, easy fatigability, depressed sexual functions, headaches, irritability, lassitude, and lack of ambition More severe mental disturbances in Addison's disease are rare and appear to be related to the premorbid personality of the patient. The following case history illustrates the symptoms in a very severe case of Addison's disease

"D G, a 28 year old, single, Jewish girl, was transferred from another hospital because of violent behavior, hallucinations and delusions of one week's duration She had Addison's disease of unknown etiology

"The past history showed that she had been treated for recurrent Addisonian crises since the age of 21 These crises were usually precipitated by an upper respiratory infection, and were characterized by prostration and vomiting, and at these times her blood pressure fell below a recordable level . . The crises were treated successfully by means of infusions of sodium chloride and sugar solution and by adrenal cortical extract

"During eight years' observation in the outpatient department of another hospital, she developed a gradual increase in pigmentation over the face, chest, and bucco-palatal mucosa Melanin pigment was demonstrated in the urine When not under adequate medical control, she complained of weakness and her blood chemistry was altered in the same direction as during the crisis, but to a lesser extent Her menses disappeared for one year, axillary and pubic hair gradually disappeared, and her thyroid became diffusely enlarged

". . In January 1946, the patient was readmitted in crisis, and demonstrated abnormal behavior, occupying much of her time by writing invitations to her birthday party on paper towels Although unmarried, she stated she was married to a man who had three businesses, that well-known dance bands would play at her

birthday party, that President Roosevelt and others would be present, and that she would later go to Canada, Chicago and Miami Actually a very modest birthday party had been planned for her

"By February, she became violent, and began to grimace and to have bizarre facial postures She then became confused While still delirious, she received a pellet of Doca by subcutaneous implantation, and the following day her conduct became normal It was noted that she recalled her delusions and was 'embarrassed.' She was discharged shortly thereafter, with her blood chemistry within normal limits

"During the succeeding month, the patient extruded her pellet, and developed new delusional symptoms She stated that a friend of her brother 'worried' her, and made her lose 25 pounds, that she had cohabited with her father several times and was pregnant She said her parents were not her real parents, that she was talented as a child, and that her mother robbed her of her talents She said that voices were speaking to her, that there was poison gas in the room, and that people with machine guns were pursuing her

"Her stream of talk was fragmented, illogical and inaccurate. The effect was one of fear Her mental content included the belief that people said that she had performed sexual perversions on women, that a 'dumb teacher, a man named Jackie, gave me those pellets,' that 'people spice things on my mind.' She was disoriented for time and place, but not for person Her memory, retention and recall, and calculation were grossly defective

"Her course in the hospital was downhill despite all medication She had fever, became comatose and died within a week after admission Necropsy was refused." (Gorman and Wortis[26], pp 268-269)

Oversecretion of the adrenal cortex stimulates the development of male sex characteristics In adult males this results in increased virility and excessive growth of the bodily hair, while in younger males it accelerates the puberty period. The latter condition is referred to as *puberty praecox,* and individuals subject to it may develop adult stature and reach sexual maturity at very early ages. Although the mental development of such children does not keep pace with their accelerated physical and sexual development, they are usually aggressively and extensively interested in sexual matters.

In the female, the oversecretion of cortin results in a deepening of voice, shrinking of breasts, growth of beard, and other masculine changes These physical anomalies may place considerable strain upon the individual's adjustive capacities, and thus may indirectly eventuate in a variety of psychopathological reactions

Prolonged adrenal secretion may occur in reaction to emotional stress, as part of the perpetual state of physiológical "mobilization" so common to those who evaluate the world as a dangerous place. In this case, there is sometimes an apparent breakdown of the adrenal glands under the strain, so that they fail to put out hormones necessary to the organism for meeting emergency stressful situations This, in turn, may precipitate a mental disorder, as we saw in Chapter 7 in our discussion of schizophrenia.

ORGANIC PSYCHOSES OF UNKNOWN ETIOLOGY

There are several rare disorders resulting from progressive degenerative diseases of the nervous system, in which the origin of the disease remains essentially unknown at the present time despite considerable research Among the better known of these are *paralysis agitans* and *Huntington's chorea.* No method of cure has been found for either one.

PARALYSIS AGITANS

Paralysis agitans, also known as "shaking palsy" and "Parkinson's disease," is a chronic

progressive disease of the central nervous system. In this disorder the face becomes rigid and masklike with speech drawling and indistinct. There is a general stiffness of the muscles and a tendency to lean forward in walking, with the result that the individual appears to be running in order to keep from falling forward In addition, there is a rhythmical tremor of various muscle groups

Although the neurological manifestations are intensified with time, so that there is increasing stiffness and tremors of the hands, lips, tongue, and other smaller muscle groups, the intelligence is little affected and there may not be pronounced mental symptoms Usually, however, the affliction is accompanied by emotional apathy and indifference, inability to concentrate, and a general lessening of intellectual interest and activity These psychological symptoms apparently result primarily from his reaction to his affliction rather than from the neurological pathology directly

Although James Parkinson described this disorder quite accurately in 1817, its actual cause is still unknown. In some cases it has been observed to follow cases of epidemic encephalitis and carbon-dioxide poisoning. In other instances it seems to be based upon either genetic or constitutional deficiencies, with emotional upsets apparently acting as precipitating factors It is most common in the age range of 50 to 70, although in post-encephalitic cases it may occur earlier. Although it has been observed in countries throughout the world, it is, fortunately, relatively rare No effective treatment has been worked out, and although the condition is not in itself fatal, it tends to run a long course with increasing deterioration

Transverse brain section through the frontal lobes showing the type of degeneration found in Huntington's chorea

Courtesy of Dr Olkon[1] and B W Lichtenstein



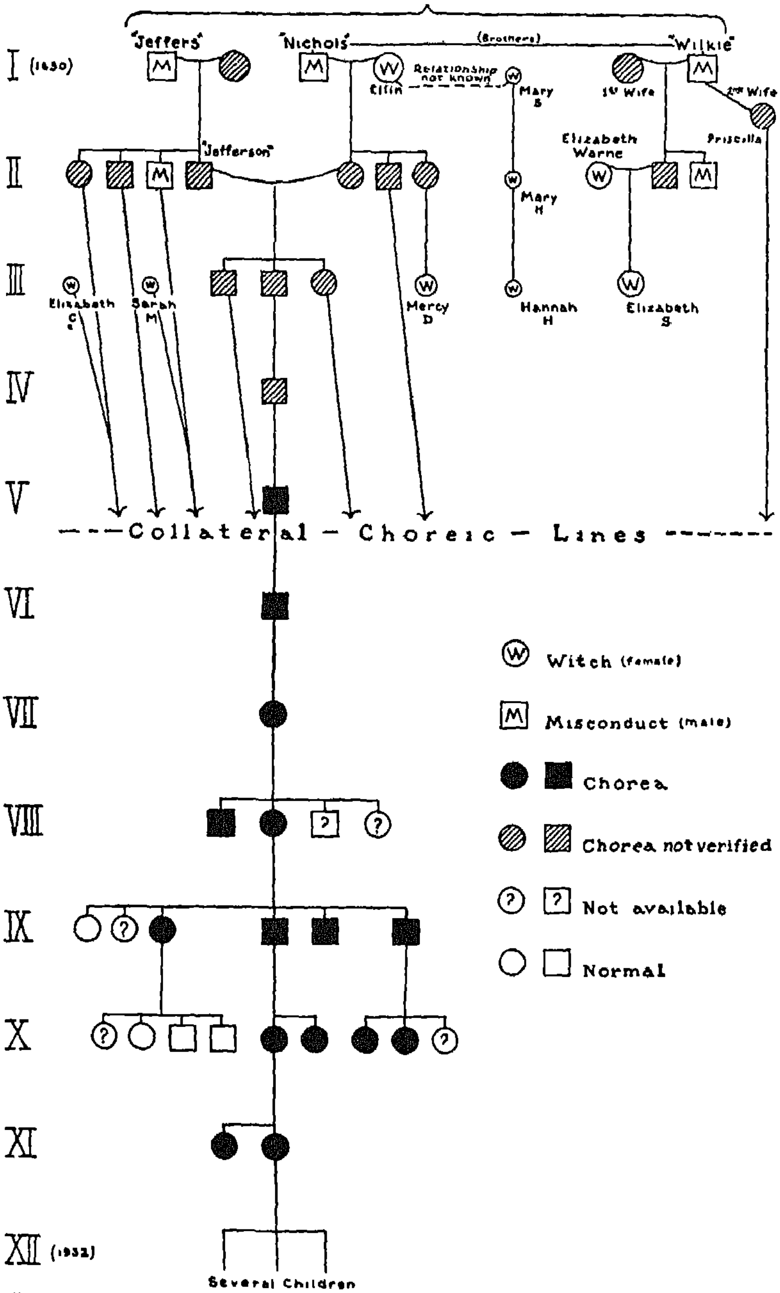
HUNTINGTON'S CHOREA

Huntington's chorea is a rare affliction of the nervous system and was first differentiated and described by the American neurologist Huntington in 1872 It occurs in adults from 30 to 50 years of age and is characterized by a chronic, progressive chorea* with mental deterioration, ending in dementia and death

Symptoms. The major physical symptoms include choreic movements, which become increasingly widespread and violent as the disease progresses; facial grimaces which become almost continuous, a bizarre, jerking, irregular gait; smacking of the tongue and lips; and slow, indistinct, explosive speech The accompanying mental symptoms typically include impairment of memory, inability to maintain attention, irritability, impaired judgment, and depression Although there may be pronounced emotional apathy, suicidal attempts, depression, and other symptoms of serious maladjustment, there is usually no delusional or hallucinatory development during the early phases unless the disease serves to precipitate a psychosis in an already psychologically predisposed individual Later, with the dementia, there may be delusions of a simple, silly type.

Etiology. The cause of the extensive and progressive neural degeneration in Hunting-

*A convulsive nervous disease, with involuntary, irregular, twitching movements



Courtesy of Dr Vessie[88]

Occurrence of Huntington's chorea in the Bures Family Group between 1630 and 1932 Several members were tried for witchcraft and misconduct in the earlier generations Unfortunately, information concerning the social behavior of the later generations is not available

ton's chorea is unknown but thought at present to be due to defective genetic inheritance (Vessie[88]) In any event the disorder runs in families and appears to follow a definite Mendelian ratio It apparently never occurs except in families showing a previous history of the disorder. The actual brain pathology consists mainly of the atrophy or degeneration of

cells in the cerebral cortex and the basal ganglia (Wechsler[91])

Treatment and prognosis. At the present time there is no effective treatment for Huntington's chorea, and the clinical picture is typically one of progressive deterioration over a period of 10 to 20 years until death comes.

In view of the apparently hereditary basis of the disorder, prevention is primarily a matter of eugenics The difficulty here, of course, is that not all members of any given family are affected However, in view of the seriousness of this disorder, it would appear unwise for members of choreic families to have offspring This, of course, does not bar them from adopting children.

ABNORMAL BEHAVIOR ASSOCIATED WITH EPILEPSY

Epilepsy has the longest medical history of any disease (Hoch[33]) Thousands of years ago it was called "the sacred disease" because it was believed to be the result of a divine visitation. In other eras it was blamed on a devil or an evil spirit which had entered the brain. Some authorities today believe that the holes found in the skulls of ancient cave men and of the early Incas were bored so that this devil could get out (Silverman[80]) In the course of subsequent history numerous other names and theories have been proposed. It has variously been called "the falling disease," "fits," "seizures," and "epilepsy" The latter term is derived from the Greek word for *seizure* and is now the accepted name A myriad of theories ranging from astrology through sex have been advanced to account for epilepsy, and practically every substance in the world capable of passing through the gullet of man has at one time or another been considered effective in its treatment (Temkin[84])

Many famous historical figures have been subject to epileptic attacks, including Hercules, Julius Caesar, Mohammed, Charles V, Napoleon, Lord Byron, Guy de Maupassant, and Van Gogh Dostoievski's *The Idiot* and a number of other classic and modern works have dealt with the epileptic and his problems Writing in 95 B C, Lucretius gives us a vivid picture of an epileptic seizure and a clue to the then prevalent view of its causation

"Oft too some wretch, before our startled sight,
Struck as with lightning, by some keen disease
Drops sudden—by the dread attack o'er powered
He foams, he groans, he trembles, and he faints,
Now rigid, now convulsed, his laboring lungs
Heave quick, and quivers each exhausted limb,
Spread through the frame, so deep and dire disease
Perturbs his spirit, as the briny main
Foams through each wave beneath the tempest's ire
But when, at length, the morbid cause declines,
And the fermenting humors from the heart
Flow back—with staggering foot the man first treads,
Led gradual on to intellect and strength."

The true incidence of epilepsy in the United States today is unknown, though it is believed to be more prevalent than either diabetes or active tuberculosis, probably affecting between 500,000 and 1,000,000 people A recent survey indicated that only about one half or one third of the people affected are receiving treatment (Silverman[80]) Although complete data from World War II are not available, a preliminary survey indicated that about six draftees in one thousand were epileptic, in World War I the figure was seven in one thousand (Hoch[33]) Army statistics from the report of the Surgeon General for 1918 indicated that Negroes were twice as liable to epilepsy as whites and also that incidence was high among mountain whites and in the native white agricultural regions of the North. Epilepsy seems to be equally prevalent among

males and females and much more prevalent among children than adults (Temkin[84]) Most individuals with epileptic seizures are of average intelligence there are no more mental defectives among people who develop epilepsy than among the general population, although with repeated severe attacks brain damage may result and deterioration may develop over a period of time

In a study of 95 University of Michigan students subject to epilepsy, Himler and Raphael[32] found the average age of onset to be approximately 17 for both men and women. Seizures had been present since birth in two cases and there was a history of infantile convulsions in five others, who had then had no further attacks until after the eighteenth year In this group males outnumbered females in the ratio of slightly less than 3 to 1.

Despite the relatively high incidence of epilepsy in the general population, only 1 2 per cent of first admissions to mental hospitals involve psychoses associated with epilepsy, and even here the role of the epilepsy in the psychoses is questionable

SYMPTOMS AND CLASSIFICATION

Epilepsy is a recurrent disturbance of consciousness accompanied by upset of the autonomic nervous system and convulsive movements or psychic disturbances An epileptic seizure may vary from a momentary minute disturbance of consciousness to an attack of wild fury In about half the patients the attacks are preceded by some kind of warning, known as the *aura*. This usually takes the form of dizziness or of discomfort in the abdomen It generally lasts but a few seconds and does not usually give the patient time to prepare for the attack

Epileptic seizures are infinitely varied in form, but for practical purposes may be classified into four main types·

1. **Grand mal: "great illness."** This is the most prevalent type of attack Its outstanding features are loss of consciousness and convulsive muscular activity During a grand-mal attack the patient loses consciousness, breathing is suspended, his muscles become rigid with jaws clenched, arms extended, and legs outstretched, and he pitches forward or slumps to the ground He may cry out or groan, although he later remembers no pain His face may become dusky, then pale, and he may bite his tongue and lose control of his sphincter.

With the return of air to the lungs his movements, instead of being rigid (tonic) become jerking (clonic) Now he begins muscular spasms with his head striking the ground, his arms thrust repeatedly outward, his legs jerking up and down, his jaws opening and closing and creating a bubbly foam in the mouth Usually in about a minute the convulsive movements slow, the muscles gradually relax, and the patient begins to return to normality. Some patients return to consciousness rather rapidly after the attack is ended, others fall into a deep sleep which may last for a few minutes or several hours

There may be several attacks a day, or they may be as rare as one a year. Sometimes attacks occur without the patient's regaining consciousness in between; this is called *status epilepticus* (Yahraes[98]) In some cases a patient is subject to grand-mal seizures and one or more of the other types of epilepsy as well

Patients subject to grand-mal seizures frequently injure themselves by biting their tongues and cutting or burning themselves Where the patient is climbing the stairs or is in other relatively dangerous positions, he may be severely injured One patient broke her neck falling against the edge of a bathtub

2. **Petit mal: "small illness."** In petit-mal epilepsy there is usually diminution rather than a complete loss of consciousness The patient stops whatever he is doing, stares vacantly ahead or toward the floor, and then in a few seconds resumes his previous activity Often there is a rhythmic twitching of eyelids or eyebrows, and the patient may drop or throw aside an object, such as a fork or spoon, which he is holding Sometimes the patient is not even aware of the attack. Attacks are more

frequent in girls and have a higher incidence around the age of pubescence (Yahraes[98]).

3. Jacksonian. This type of epileptic seizure, first described by the neurologist Hughlings Jackson, is much like a modified grand-mal attack The attack begins in one region of the body with a muscle twitching or spasm or with a sensory disturbance such as numbness, tingling, or burning These muscular or sensory disturbances then spread over the entire side of the body on which they originate Often the patient remains conscious during the initial phase of the attack, and then loses consciousness as the attack spreads. In many cases the attacks terminate in generalized convulsive seizures Apparently in these seizures the attack arises from focal involvement in the brain areas controlling the particular movements or sensory functions where the first symptoms of the attack appear (Yahraes[98])

4. Psychomotor. The principal feature of these attacks is a psychic disturbance, which varies greatly from one patient to another There is loss of consciousness, but activity continues and the patient appears to be conscious Attacks usually last a few seconds or minutes but in rare cases last for several days, and the patient may perform either routine tasks, or some unusual or antisocial act Fetterman cites the case of a patient who "will be walking along Euclid Avenue and notice the store windows at East Ninth Street and that a clock on the corner reads 11 30 He may then continue walking a matter of a mile and suddenly notice that it is 12 00 He has been entirely unaware of sights seen or sounds heard, and has no recollection whatsoever of what he has done His behavior was purely automatic" (Fetterman[23], pp 383-384) Similarly, Lennox[50] cites the case of a New York dramatic critic who began to undress at a mixed social gathering and became surly when forcibly deterred

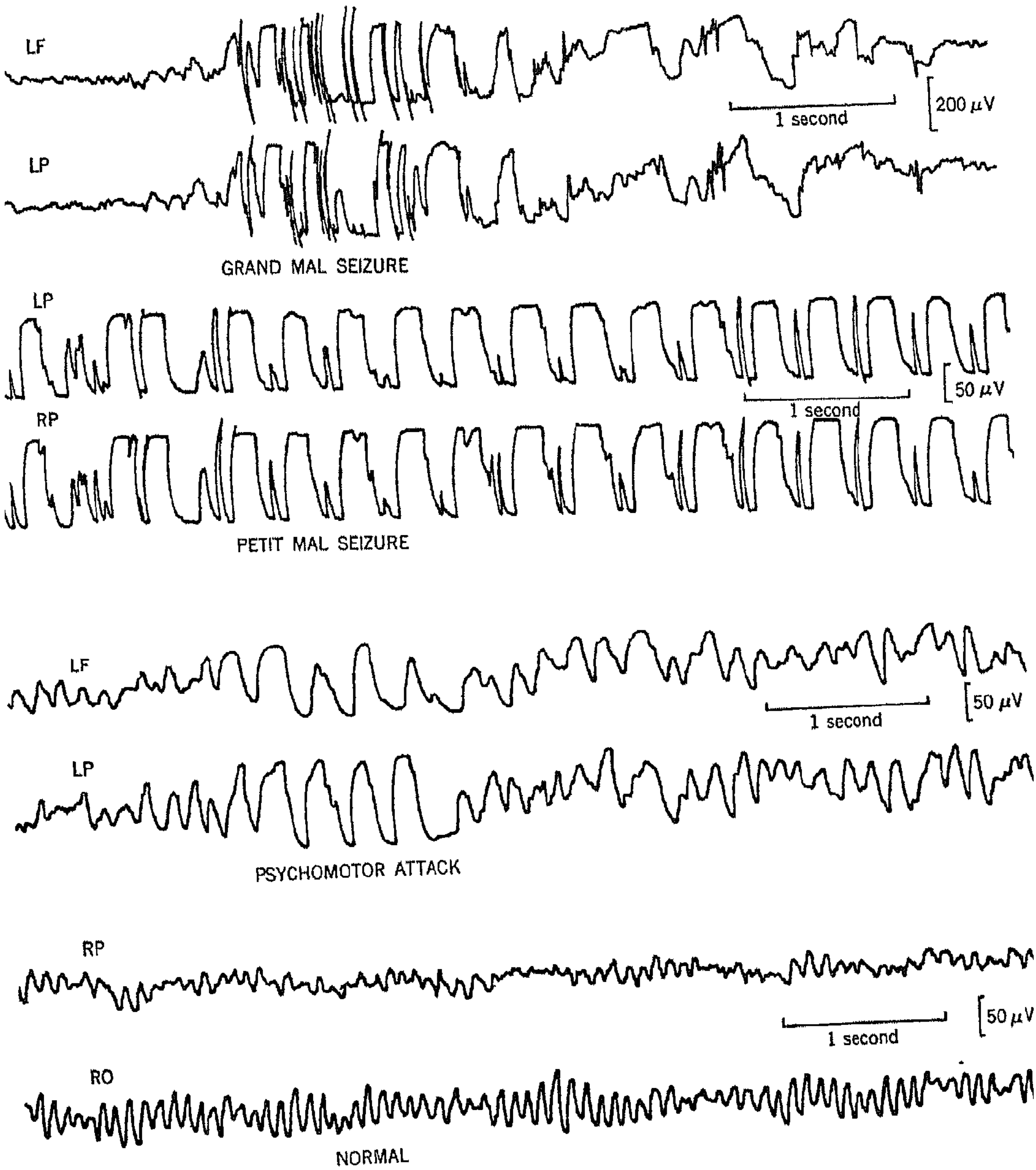
Sometimes the patient appears to be in a rage, during which he may mutilate himself or injure other people The Flemish painter Van Gogh was subject to periods of irrational behavior for which he was later amnesic On one occasion he cut off one of his ears, wrapped it in a sack, and presented it to a prostitute (Born[8]) In a more serious case, a brain-injured soldier subject to psychomotor epilepsy reported a dream in which he found himself trying to ward off attackers Actually during this incident he had beaten his 3-year-old daughter to death The child's skull had been fractured and her right hip broken, but the patient was completely amnesic for the entire tragic episode, except for the dream

For reasons which are not fully understood, psychomotor attacks appear most frequently among adult men Fortunately, only a very small number of these patients have attacks of a violent homicidal type

The following case of a 28-year-old man illustrates many of the symptoms typically associated with psychomotor epilepsy

The patient was adopted by foster parents who took care of his material needs but brought him up in an atmosphere of rigid discipline, lacking in warmth and affection After graduation from military school, he had two unsuccessful marriages in rapid succession and then entered the Army During his Army service he was thrown from a jeep, suffering a severe concussion, and was unconscious for a period of several hours He was hospitalized for about three weeks

After that time he complained of a severe pain in the left temporal region In addition, about three years after the accident he began to suffer periods of amnesia, the shortest of which was about two hours and the longest of which lasted for slightly over five days These spells gradually increased in frequency and severity during the ensuing two years On two occasions the attacks occurred during working hours and apparently did not interfere seriously with his work, since no one else apparently noticed any difference in his behavior. However, during a more serious attack which occurred one evening at his parents' home he used profane language and broke up several pieces of furniture His



Courtesy Thorpe and Katz[45]

Electroencephalograms showing epileptic and normal brain waves
LF = left frontal, LP = left parietal, RP = right parietal, RO = right occipital, μV = microvolts

mother stated that he seemed to be in a sort of "wild rage and swore at the top of his voice"

During a seizure just prior to his hospital admission the patient became extremely aggressive and combative He almost wrecked the home of his parents and when his father tried to restrain him he knocked him down and left. Shortly thereafter he went to his employer's home and made a brutal attack on his employer's wife, knocking out several of her teeth, fracturing two of her ribs, and otherwise injuring her seriously This attack apparently lasted about six hours, and he was completely amnesic for the entire episode

Neurological examination including EEG* findings confirmed the diagnosis of psychomotor epilepsy The patient was put on dilantin and mesantoin and later phenurone without any marked improvement Two weeks after his admission to the hospital he made a homicidal attack on another patient, and after six months of hospitalization was still in a closed ward

Mental deterioration. In some cases, epileptics show progressive deterioration or associated psychotic reactions, but this is quite rare, and apparently the psychopathology results primarily from the reaction of the patient to his affliction rather than from anything inherently deteriorative in the epilepsy itself For example, in a group of 85 epileptics, whose frequent seizures necessitated their institutionalization, Falk *et al*[22] found that only three became psychotic and none showed mental deterioration over a nine-year period

The following case, diagnosed as *epileptic deterioration,* is one in which a psychotic deteriorative reaction did appear in connection with epileptic seizures. The patient was 37 years old at the time of his hospitalization.

The patient suffered a gunshot wound in the head during a hunting trip Two years later he began to have Jacksonian seizures beginning in the left hand Although he was treated with dilantin and other drugs over a period of some five years, he continued to have attacks about twice a week During the next two attacks, which had formerly been c Jacksonian seizures, became compl grand-mal seizures as well. The p unable to work and used up all of h

He was hospitalized at the suggest wife, who stated that he had become irritable and depressed and that she that he would either injure her or k or both. On admission to the hospit belligerent and uncooperative and a other patients of stealing his money he had attended two years of colleg his injury, his Wechsler-Bellevue s cated borderline intellectual functio manifested a variety of hypochondri plaints and delusions, among whicl attitude that sex had ruined his life resulted in his brain being "destroye time to time he became extremely an tated, and depressed

Despite medical therapy, the patie in the hospital was downhill durin years that he was observed He becar ingly narcissistic and self-centered in ties and paid no attention to other p the ward or to personal hygiene Of peared confused and sometimes spel instead of pronouncing them when When his wife visited him, he would appear somewhat silly and jocular, as compensate for his situation and indi that he was getting along fine, on c sions he appeared depressed, apat withdrawn In general, the clinical p peared to be a mixed picture of withdrawal in the face of his change ation and actual organic deterioratior from rather extensive brain damage

* Electroencephalographic recordings of brain waves

DYNAMICS

Numerous theories have been adv garding the causation and dynami leptic attacks, and here, as in the cas disorders, our ideas have changed as our knowledge has increased.

Biological factors. Hysterics and c

tally ill patients may simulate epileptic seizures, but apparently in true epilepsy some underlying brain condition is always involved, as evidenced by the fact that distinctive brain waves of a pathological variety have been found not only for epileptics in general but even for the four different types But little is known about the nature or causation of this underlying brain condition, and in many cases several other factors seem to be involved also.

Many investigators have believed this brain condition to be hereditary They point to the fact that a family history of epilepsy is at least five times as common among epileptics as for the general population In addition the typically epileptic brain waves are found far more often in close relatives of epileptics than in the general population (Lennox[50]).

However, from the fact that not all individuals with these brain waves actually develop epilepsy, we must conclude that in many cases, if not all, the hereditary factor does not do more than predispose one toward epilepsy; environmental factors must do the rest. And Dr W G Lennox[50], perhaps the foremost authority on epilepsy, goes so far as to suggest that the predisposition itself may be either inherited or acquired and that in most cases it is probably of mixed origin

Where epileptic seizures are associated with known brain injuries, several neurological theories have been advanced concerning the actual dynamics involved Perhaps the most popular has been the "irritation theory." Here the epileptic seizures are thought to be the result of direct stimulation or irritation within the cerebral cortex. The injury itself is supposed to have left the neural tissue of the cortex hypersensitive to stimulation or irritation, and in some way an abnormal discharge of the neurones of the brain is set off, leading to epileptic symptoms The nature of the irritating factor is not known, but may be related to metabolic changes Special diets and drugs for the treatment of epilepsy have been based upon this theory.

Brain injuries which result in cerebral predisposition to epileptic seizures may occur before, during, or after birth, or the injury may be the result of an infection following diseases like measles, meningitis, encephalitis, or whooping cough. Kidney disease or glandular dysfunction apparently may also react unfavorably upon the brain and predispose the individual to epileptic seizures.

In the Michigan study[12] already mentioned, organic factors were found in 22 of the 95 cases. These were divided about equally among neural disorders, endocrine dysfunction, head injuries, and toxic states (alcohol). However, the precise relationship, if any, between these factors and the epilepsy could not be determined.

Psychological factors. Considerable speculation has centered around the hypothesis that epileptic convulsions are tension-reducing mechanisms which represent an explosive discharge of the lower brain centers, resulting in the discharge of emotional tensions There is a wealth of practical clinical observations to support this point

> An epileptic patient was referred to a psychiatrist, who, by means of drugs, freed him from attacks for a period of some four weeks At this time the psychiatrist went on a vacation, and psychotherapy was temporarily suspended The patient shortly began to feel terribly tense, anxious, and depressed and felt that if he could only have a seizure he would be all right again

Some investigators, following this theory, are inclined to look upon psychomotor epilepsy as a psychic equivalent and substitute for the epileptic convulsions In these psychomotor conditions, the so-called *epileptic automatism* or *epileptic dream states* presumably involve activities which are tension reducing even though they may be definitely abnormal behavior

Psychological conflicts and frustrations have long been known to be associated with the precipitation of epileptic seizures in organically predisposed individuals. This point is well brought out by Kupper[47] in his study of

a patient whose attacks had started some six years before, precipitated by an emotional upset. Under hypnosis, convulsive seizures were induced when the therapist discovered and suggested the former psychic conflict Interestingly enough, no other means of stimulation was effective in producing a seizure In addition, brain waves were altered by suggesting under hypnosis that the patient regress to an age prior to his first convulsion

In this case Kupper concluded that the patient had a predisposing constitutional background which produced no symptoms until a psychic conflict precipitated them Apparently there is an emotional threshold which must be passed before a convulsive seizure takes place. Perhaps the emotional problem—often thought to be the problem of handling intense hostility—acts as a trigger which stimulates cortical activity beyond the normal level These psychological stresses do not in themselves cause epileptic seizures, however. Although they may increase the frequency and even the severity of attacks, such stresses appear to operate as precipitating causes only in organically predisposed individuals

Certain personality traits have commonly been associated with epileptics, though there has been disagreement as to how far these traits are causal factors and how much they represent typical ways in which epileptics have reacted to their disorder. And more recently, in studies which have been well controlled and make an attempt at statistical treatment of data, no such distinct personality patterns have been found (Arluck[2]; Landisberg[48]; Lisonsky[55])

TREATMENT AND PROGNOSIS

In 1911, Dr Alfred Hauptman introduced the use of phenobarbital in treating epileptics and met with some success Then, in 1937, Putnam and Merritt[71], after trying many combinations of drugs related to phenobarbital, discovered dilantin. They reported that after using this drug on 118 patients suffering from major epilepsy there was complete relief in nearly 60 per cent of the cases and a marked reduction in the number and severity of attacks in nearly 30 per cent of the remainder Since dilantin, many new and even more effective drugs have come into experimental use, one of the most promising of which is mesantoin (Hunter[34]).

Neither dilantin nor mesantoin is effective in the treatment of petit mal, however; for this type, another new drug, called tridione, has been developed. In 1946 Lennox and Davis[51] reported their results with 182 petit-mal patients treated with tridione, none of whom had experienced relief with previous treatment attacks were completely wiped out in 31 per cent of these patients and very greatly reduced in another 31 per cent.

The induction of a state of acidosis by means of the ketogenic diet has been found helpful in some cases, as has dehydration in others Attempts have also been made to control epileptic seizures by inducing electroshock convulsions at various intervals Some success has been reported, possibly lending support to the theory of convulsions as tension-reducing mechanisms (Taylor[83]). Success has been reported in other cases through the use of psychotherapy In general, therapy is directed at raising the resistance level of the patient to seizures, either by means of drugs and other somatic procedures or by psychotherapy Here, as in the case of many other disorders, a combination of somatic and psychotherapeutic procedures has proved more effective than either one singly

In this respect it may be pointed out that a crucially important aspect of therapy is the proper orientation of the individual toward his disorder Self-pity, shame, withdrawal, avoidance of marriage and children, and numerous other related problems can best be worked through with the aid of psychotherapy. In fact, Himler and Raphael[32] state that the effective treatment for epileptic patients requires as much or more care for personality and adjustment factors as for the medical aspects This they feel is particularly

true of young patients, who may have great difficulty in accepting and adjusting to the problems presented by their epilepsy. Both individual and group psychotherapy are of great value in helping these patients

Epileptics as a group seem to have normal scholastic ability Himler and Raphael[32] found that 70 per cent of the epileptic students they studied were capable of doing creditable college work In a follow-up of 63 of these same students they found, on the whole, excellent adjustment:

54 had made entirely satisfactory personal adjustments
3 had chronic neurotic reactions
4 showed basic personality instabilities
2 were deteriorated, one with paranoid elaboration

Thus epileptic seizures need not prevent one from attaining either good academic training or successful social and vocational adjustment after leaving college.

PREVENTION

Adequate preventive measures have not yet been developed for epilepsy Early detection and treatment of patients with this condition is undoubtedly important, and in many milder cases the seizures may be prevented or minimized by avoidance of extreme psychological stress or fatigue, and by a well-ordered pattern of living There is considerable evidence to support the contention of some investigators that, for the benefit of possible offspring, two persons with epileptic brain waves should not marry regardless of whether or not they have actual attacks.

PSYCHOSES OF THE AGED

"But worse than any loss of limb is the failing mind, which forgets the names of slaves, and cannot recognize the face of the old friend who dined with him last night, nor those of the children whom he has begotten and brought up" (Juvenal[37]) such references to mental disturbances in the aged and to the more dramatic aspects of apoplexy are found in the earliest scientific and literary works Shakespeare's King Lear has been considered an example of senile dementia, and in *Gulliver's Travels* there is a famous passage picturing the progressive physical and mental decline in senility

Today these disorders have become increasingly important, due to our increasing longevity Through the prolongation of life by medical science the United States is approaching a far greater older population, both absolutely and relatively, than any other country has ever had in all history. In the 1930 decade there was a general population increase of 7 2 per cent, but the number of persons over 65 years of age increased 35 per cent[85]. Today about 10 million people in the United States are over 65, it is estimated that in 1980 there will be over 26 million people over 65—some 15 per cent of the total population—if the present rate of aging in the population continues (Kaplan[38])

The shift in the age make-up of our population has given rise to a great many psychological, sociological, and medical problems. which are receiving more and more attention as their importance is being realized. We might suspect that among these problems would be an increase in the mental diseases of old age, and such is the case Between 1930 and 1944 the admissions to the mental hospitals of patients over 65 years of age increased over 60 per cent (Johnson[36]) It has been estimated that by 1980 we may expect a 200 per cent increase over the present in first admissions to state hospitals for psychoses of the aged (Kolb *et al*[40]) According to Malamud and Dayton[18], these psychoses now loom as the leading problems of psychiatry

Just why men age is a problem of great theoretical and practical interest in modern science In general, there are two major con-

temporary views. The older and more conventional view is that the physiological aging of the body is quite as natural and inherent a process as is growth in the earlier period It occurs in later life after the fundamental biological functions have been fulfilled, and is considered an irreversible process and an inherent characteristic of the germ plasm itself. The second and more recent view of aging suggests that the gradual degenerative or involutional processes are due to infections, toxins, traumas, and nutritional disturbances which have impaired the general functional and regenerative capacities of the body cells. From this point of view, aging and death result from the body's failure to eliminate waste products and repair tissue damage as rapidly as such wastes accumulate When we learn to alleviate the ravaging effects of degenerative diseases which attack the heart, kidneys, brain, and arteries in old age, some authorities speculate that man may live to be 150 or more years of age.

Irrespective of which theory we may accept, the present fact remains that man does age, and a crucial problem becomes that of distinguishing between normal senescence and pathology in old age The whole problem is complicated by the fact that there are many changes in old age which, because of their common occurrence, are considered normal and typical but which could just as well be considered pathological since they are distinctly maladaptive and, occurring during any other life period, would be called abnormal

"Normal" changes in old age. Old age is associated with many bodily infirmities. Joints are less flexible, bones lose their dense structure and become more easily fractured, perceptual acuity decreases, muscles become hypertonic and tremor is often present, the skin becomes wrinkled and loses its elasticity, the hair becomes thinner and gray, the internal organs undergo a gradual atrophy, and there is a gradual decrease in physical strength and stamina (Karnosh and Zucker[39]) The vascular and nervous systems are also among the first to suffer from the aging process. The brain becomes smaller and there is some degree of atrophy, together with abnormal deposits of iron scattered throughout the nerve cells Peculiar formations called *senile plaques* are typically found, together with a hardening of the cerebral arteries and impaired circulation. Accompanying these degenerative changes is a decline in abilities, such as muscular strength and coordination, which depend directly upon the anatomy and the physiology of the organism

Psychological regression tends to accompany this physiological regression Most old people are quick to acknowledge the physical changes, but they do not like to think that their intellectual capacities have declined. Wechsler[90] has shown, however, that there is actually a greater impairment of intellectual capacities than of physical capacities, as measured by the various tests in the Wechsler-Bellevue Intelligence Scale Generally speaking, information, general comprehension, and verbal capacities hold up better with age than do speed of performance, memory, learning of new material, and nonverbal capacities It should be noted, however, that there are wide individual differences here Those who remain intellectually active and vitally interested in the events of the world about them may continue into advanced age with little perceptible loss in intellectual acuity There are many striking examples of famous authors and composers who have produced their best works in later life. Even where there is considerable neural damage, resulting from senile or arteriosclerotic changes, some individuals show remarkable ability to compensate for such damage and exhibit few symptoms of decreasing intellectual ability.

The gradual lessening of mental alertness with age is typically accompanied by a narrowing of social and other interests and a loss of adaptability to new ideas or to drastic changes in routine. There may be garrulousness, with increased circumstantiality and irrelevance, impairment of memory for recent

events, and a tendency to conservatism and intolerance. Drowsiness after meals, accompanied by night restlessness and a tendency to untidiness, may also be present In many cases there is a marked self-centering of interests and a preoccupation with the bodily functions of eating, digestion, and excretion

Mental illness in old age. When these various changes, typical of most older people, become severe and are accompanied by periods of marked confusion and loss of touch with the environment, they are considered indicative of mental illness. The two major psychotic disorders of the aged are the *senile psychoses* (associated with cerebral atrophy and degeneration) and *cerebral arteriosclerosis* (associated with blocking or hemorrhage in the cerebral arteries). Both of these are classified as organic psychoses because it has long been held that the degenerative senile and arteriosclerotic changes in the brain are the direct cause of the disorientation and other psychotic symptoms As we shall see, however, there is little correlation between the severity of clinical symptoms and the actual degree of neurological damage

It should be pointed out that mental ill-health among the aged is by no means restricted to these two syndromes Manic-depressive reactions, schizophrenia, and particularly involutional psychotic reactions may be found in older patients. In addition, long-standing neurotic patterns may continue into old age or new ones may appear for the first time in response to the increased stress of this life period Anxiety states, obsessive-compulsive reactions, and hypochondriacal reactions are the most prevalent psychoneurotic patterns among older people. In these cases the dynamic pattern is essentially the same as that discussed previously in the chapter on neurotic reactions

SENILE PSYCHOSES

With the degenerative brain changes of old age, we typically find a clinical picture of progressive mental deterioration. Since many senile patients can be cared for at home, senile disorders are probably more familiar to the average person than other psychotic reaction patterns

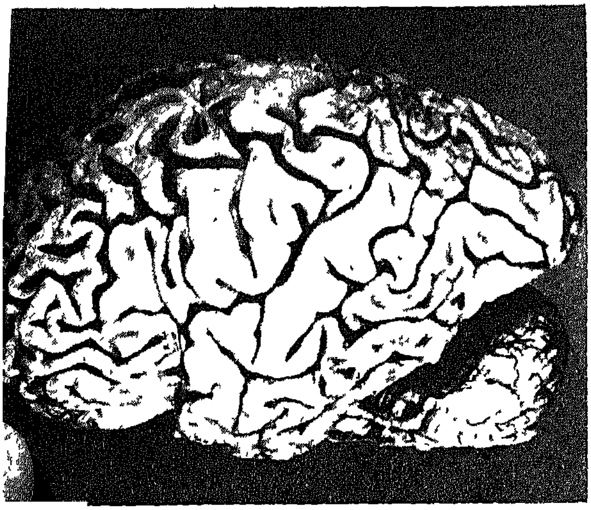
Senile psychoses constitute approximately 10 per cent of the first admissions to mental hospitals (Rothschild[76]) Females outnumber males in the ratio of 3 to 2, which might be expected in view of the slightly longer life span of the female The median age at first admission is a little over 70 for both sexes, although the onset may be any time from the 60's to the 90's.

The particular symptom pattern in senile psychoses may vary widely from one patient to another, depending upon the pre-psychotic personality of the patient and the nature and extent of the brain damage.

Two groups of senile psychoses have been distinguished (1) senile dementia, and (2) pre-senile psychoses Cases in the latter group, as its name implies, tend to occur in an earlier age and are extremely rare.

Senile dementia. The onset in senile psychotic reactions is usually gradual, involving a slow physical and mental letdown, reflected in an increasing failure of efficiency and in impairment of memory In some cases a physical ailment or some other situational stress may appear as a dividing point, but usually the patient passes into a psychotic state almost imperceptibly, so that it is almost impossible to date the onset of the disorder (Rothschild[77]). There is typically an exaggeration of previous personality traits, a narrowing of interests, loss of memory for recent events, impressibility, restlessness, insomnia, irritability, and a lack of attention. Suspiciousness and jealousy may appear and may develop into paranoid states. The patient may get up in the small hours of the night and putter aimlessly about the house In some cases he may wander away from home and be unable to find his way back.

Some patients become very untidy and careless in personal habits, although this particular kind of deterioration is usually a later mani-



Courtesy of Dr Olkon[67], K Lowenberg Scharenberg, and Archives of Neurology and Psychiatry

In senile dementia and the pre-senile psychoses, there is actual atrophy and degeneration of the brain tissue, caused partly by inadequate circulation Note wide fissures and shrunken, atrophied convolutions This is the brain of a psychotic patient who had suffered from Pick's disease. (See pages 358-360)

festation Patients are often easily aroused to either cheerfulness or tears, anxious and agitated states are frequent, but deep depressions are uncommon There may be intolerance of changes, and any disturbances in customary routine may arouse tension and irritability Impairment of judgment and a decrease in control of sexual impulses sometimes lead to dishonest or immoral behavior, the latter often taking the form of molesting of children

As the psychosis develops, the memory impairment becomes more pronounced, although the patient may be able to remember events of childhood when later events have been forgotten This is probably closely related to the tendency of the senile patient to live in the past, indulging in reminiscences concerning childhood events and other occurrences of long ago He may tell the same stories over and over again Fabrications and loss of accurate temporal relationships are common, for example, the patient may think that a childhood event happened yesterday He may have difficulty in remembering how many children he has, or whether he is married or not, he may ask for a mother or father who has been dead for many years He has trouble remembering the names of new acquaintances and sometimes even members of the family, and often cannot remember where he has left various objects There is increasing impairment of comprehension, with some degree of confusion and eventually a disorientation for time and place and defective self-identity Speech becomes rambling, circumstantial, and often incoherent, delusions, hallucinations, and delirious episodes may gradually make their appearance

Specific symptoms such as restlessness, agitation, and delirious states may come and go from day to day, and there is, of course, a great deal of individual variation in the rapidity of progression of the disorder For convenience, senile reactions have been divided into five groups.

1. *Simple deterioration* This is, as the name suggests, a relatively uncomplicated exaggeration of the "normal" changes of old age The patient gradually loses contact with the environment and develops the typical symptoms of impressibility, tendency to reminiscenee, intolerance of change, disorientation, restlessness, insomnia, and failure of judgment. This is the most common of the senile psychotic reactions, constituting about 50 per cent of the entire group, according to Strecker and Ebaugh[82]

The following case is typical of simple deterioration

The patient had been a successful engineer and had retired some seven years prior to his hospitalization During the past five years he had shown a progressive loss of interest in his surroundings and during the last year had become increasingly "childish" His wife and eldest son had brought him to the hospital because they felt they could no longer care for him in their home, particularly because of the grandchildren They stated that the patient had become careless

in his eating and other personal habits, was restless and prone to wandering about at night, and couldn't seem to remember anything that had happened during the day but was garrulous concerning events of his childhood and middle years After admission to the hospital, the patient seemed to deteriorate rapidly He could rarely remember what had happened a few minutes before, although his memory for remote events of his childhood remained good When he was visited by his wife and children he did not recognize them, but mistook them for old friends, nor could he recall anything about the visit a few minutes after they had departed The following brief conversation with the patient, which took place after he had been in the hospital for nine months, and about three months prior to his death, shows his disorientation for time and person

Dr How are you today, Mr.——?

Pt Oh . hello . . (looks at doctor in rather puzzled way as if trying to make out who he is)

Dr Do you know where you are now?

Pt Why yes I am at home. I must paint the house this summer It has needed painting for a long time but it seems like I just keep putting it off

Dr Can you tell me the day today?

Pt Isn't today Sunday why, yes, the children are coming over for dinner today We always have dinner for the whole family on Sunday My wife was here just a minute ago but I guess she has gone back into the kitchen

2. *Paranoid reaction* In this type of senile psychosis the main characteristic is a gradual formation of delusions, usually of a persecutory, erotic, or grandiose nature, and usually accompanied by related hallucinations For example, the patient may develop the notion that his relatives have turned against him and are trying to rob and kill him His suspicions are confirmed by the noxious gases which he smells in his room, or by the poison he tastes in his food. Fortunately, such delusions rarely lead to overt homicidal attacks on his alleged persecutors. Grandiose delusions are usually minor in degree and may be obviously wish-fulfilling in nature For example, Rothschild[76] cites the case of an 84-year-old unmarried woman with the delusion that she was married and had two children

The patient's behavior may be further modified by periods of mutism and catatonia in which he may assume some stereotyped posture, or he may engage in senseless mannerisms and rituals The latter symptoms have led some investigators to consider this condition closely related to schizophrenia (Karnosh and Zucker[30]) In the early stages the memory loss and other evidences of senile degeneration are usually not so pronounced as in other types of senile reactions

The following case is typical of paranoid senile reactions

The patient, a woman of 74, had been referred to a hospital after the death of her husband because she became uncooperative and was convinced that her relatives were trying to steal the insurance money which her husband had left her. In the hospital she complained that the other women had joined together against her and were trying to steal her belongings She frequently refused to eat, on the grounds that the food tasted funny and had probably been poisoned She grew increasingly irritable and disoriented for time and person She avidly scanned magazines in the ward reading room but could not remember anything that she had looked at The following conversation reveals some of her symptoms

Dr Do you find that magazine interesting?

Pt Why do you care? Can't you see I'm busy?

Dr Would you mind telling me something about what you are reading?

Pt. It's none of your business . I am reading about my relatives They want me to die so that they can steal my money

Dr Do you have any evidence of this?

Pt Yes, plenty They poison my food and they have turned the other women against me They are all out to get my money. They have even stolen my blue sweater

Dr Can you tell me what you had for breakfast?

Pt . (Pause) I didn't eat breakfast . it was poisoned and I refused to eat it They are all against me

These paranoid reactions are largely determined by the pre-psychotic personality of the patient, and tend to develop in individuals who have always been suspicious and somewhat paranoid in their make-up In some cases the senile degenerative changes and the stresses and strains of the senile period have merely intensified an already existing mildly paranoid reaction This type of senile psychosis constitutes some 15 to 25 per cent of all senile reactions (Rothschild[77])

3. *The presbyophrenic type* This senile psychosis is characterized by marked impairment of memory, fabrication, and a jovial, amiable mood. Such patients may appear superficially alert, and may talk volubly in a rambling, confused manner in which gaps in present memory are filled in with events that occurred twenty or thirty years before. They usually show a peculiar restlessness or excitability and engage in continual aimless activity A patient may fold and unfold pieces of cloth as if he were ironing, or he may collect various discarded objects with a great show of importance.

This type of senile reaction occurs in individuals who have been lively, aggressive, jovial, and extravertive in their younger days It constitutes only about 8 per cent of the entire group of senile psychotics and has an unfavorable prognosis, the patients usually exhausting themselves within one or two years (Karnosh and Zucker[39])

The following conversation illustrates the jovial mood, impaired memory, and fabrication usually seen in these patients

Dr How do you feel today, Mr ——?

Pt Just fine, doctor Just fine Isn't that funny, doctor, I was just thinking about you How are you today?

Dr Very well, thank you. How is your work progressing?

Pt. Fine, doctor, just fine. I'm always busy here, I can't stand to sit and do nothing. When I first came here I was kind of worried because I didn't know exactly what was expected of me, but now that I have charge of the Hospital laundry, it keeps me jumping

Dr Are you well paid for your work?

Pt. Oh, yes, doctor Why, just the other day I got another raise That shows how important my work is . . the fifth raise in two years not bad, doctor, eh?

Dr How long have you been working in the laundry?

Pt Well, let's see, doctor . I would say about 10 years yes, I came in May of 1938 . . I had just graduated from high school made good grades, you know, but jobs were scarce and I had to start at the bottom I'm a hard worker though and now I am the superintendent You can't keep a good man down, they always say

4. *Delirious and confused types* In these cases there is very severe mental clouding in which the patient becomes extremely restless, combative, resistive, and incoherent He recognizes no one and is completely disoriented for time and place. Such delirious states may be precipitated in old people by slight infections or traumas such as a broken hip, bronchitis, a septic throat, and so on. Fortunately, this form of senile psychosis is relatively uncommon, for the condition is often followed by exhaustion and death

5. *Depressed and agitated types.* Here the patient may suffer from delusions of poverty or may evidence morbid ideas about cancer, syphilis, and other diseases. He may feel that he is headed for the poorhouse, that nobody wants him, and that he is a senseless burden on his children and just generally "in the way" In some cases the patient becomes self-accusatory and develops delusions of great sin In many respects the symptoms resemble those in involutional reactions, and as in other psychotic depressions the possibility of suicide must be guarded against

General deterioration in all five types continues on its downward course until eventually all patients become so deteriorated and oblivious of their surroundings that the final symptoms are very much alike, regardless of the earlier type. Patients become helpless, incontinent, and bedridden and are reduced to a completely vegetative existence (Rothschild[77], Kaplan[38]). Eventually death results from pneumonia or other terminal infections.

Pre-senile psychoses. This classification consists chiefly of two brain-disease entities: (1) Alzheimer's disease, and (2) Pick's disease. These resemble typical senile psychotic reactions but can be distinguished chiefly by their appearance at an earlier age.

1. *Alzheimer's disease* is named after the German psychiatrist Alzheimer, who first described it in 1907. It is more common among women than men in the ratio of 3 to 2, but is quite infrequent, not more than 150 cases having been reported in the medical literature (Jervis[36]).

Alzheimer's disease differs from senile dementia primarily in terms of (1) its earlier age of onset (usually the forties or fifties), (2) the especially severe brain damage and mental deterioration during the early stages of the illness, and (3) the development of aphasias and apraxias, in which articulation of words becomes severely impaired and the words may be slurred and mixed up. The patient may lose the ability to carry out simple skills like dressing or making a bed.

The course of the disease can be conveniently divided into three stages (Jervis[36]). The first stage is characterized by defective perception and comprehension, by a narrowing of the ability to perform in several fields at once, and by intellectual deterioration, which first becomes apparent in the field of calculation and logical reasoning. Loss of memory for recent events is also typically one of the early symptoms. Although the emotional reaction of the patient depends to a large extent upon his pre-psychotic personality, the predominant mood is usually one of depression, anxiety, and irritability. Apathy and euphoria during the early stage are uncommon. Occasionally there are general behavior changes in the direction of antisocial or immoral acts. Language impairments are also usually apparent during the first stage of this disorder. Words are forgotten, pronunciation is difficult, comprehension of spoken language is faulty, and errors are committed in writing and reading.

In the second stage, the symptom picture becomes more pronounced. Intellectual impairment is now obvious in every mental function. Memory is particularly impaired, and confabulations may be used to fill in the memory gaps. In general, the patient's mood is one of depression and apprehension. Apathetic and euphoric states are occasionally encountered but are rare. The patient may compulsively cry or laugh and there are usually other indications of a general hyperactivity which may take various forms: general restlessness, aimless wandering around, repetition of acts, and purposeless movements such as picking the nose. As the dementia advances, the overactivity becomes increasingly purposeless and futile.

During the second stage, speech impairments also become increasingly severe. Words are slurred, names are mixed up, grammatical errors become common, and there is often a tendency to senseless rhyming and repetition of words.

During the third or terminal stage of this disorder, the patient is reduced to a vegetative existence, and there is little to distinguish his condition from that seen in the terminal stages of other organic brain disorders.

Although the symptoms in the following case are not entirely typical because of the apathy and sleepiness of the patient during the first stage and his euphoric mood during the second stage, it does in general serve to illustrate the symptomatology in this disorder.

"The patient had always been a happy, sociable person, who spent the evenings in the family

circle, talked a good deal, sang and indulged in other simple recreation At the age of 45 his behavior changed a great deal He began to feel sleepy most of the time. He would come home from work, sit down and fall asleep in a chair At the same time, his employer noticed that he was not as efficient as he had been, he took no interest in his work, he appeared to be confused and very quiet; he paid no attention to co-workers with whom he was on friendly terms, and he dropped a job before he finished it The firm retained him for over a year, hoping that he would get better, but finally had to discharge him On leaving his position he became more sleepy and spent most of the day dozing in a chair When his wife died . . the patient was so confused that he was entirely incapable of making plans for the funeral

"Three years before admission to the hospital, the father took the patient to live with him and do light housework This plan, however, did not materialize as the patient was incapable of doing even the easiest tasks He became entirely dependent on his father He was not able even to dress himself When he attempted to do so he would get his clothes into a mess and instead of trying to straighten them out, he would lie down and go to sleep When the father came home he frequently found the patient lying down clad in his underwear, which was either on backward or only half on He was forgetful and could not remember anything that his father told him. On one occasion the father returned from work and noticed an odor of gas He learned that the patient had turned on the gas range and forgotten to light the jet The patient complained of feeling ill and was aware that something was wrong with him He thought that a little girl was planning a scheme to arrest him.

" the condition continued to grow worse, and on June 27, the patient was admitted to the State Hospital for Mental Diseases

"There, the patient appeared to be about ten years younger than his age He giggled and chuckled continually and when asked questions uttered an unintelligible jargon, in which occasionally separate words could be made out, but which consisted for the most part of a rapid repetition of syllables and parts of words When left in a chair he made purposeless movements, chewing, sucking air through closed lips, plucking at his clothes, whistling, rubbing his palms over his thighs or fumbling with the toes of his slippers Twitchings of the muscles of the trunk and upper extremities were noted The mood was one of euphoria, especially when he was addressed When questions were pressed, he would say, 'Come on back, I didn't take any—where are you walking,' and give other meaningless answers Once when the knee jerks were examined he suddenly straightened up, swore and asked abruptly, 'What are you trying to do?' He showed obvious echolalia, when asked how old he was, he said '45, 46-6-6' An interview would usually consist in the patient's repeating the questions asked and emitting bursts of laughter, he would imitate the examiner's voice and questions asked, repeating them innumerable times This usually discouraged further attempts at examination It was impossible to determine his intellectual functions, but it was obvious that he suffered from a profound dementia ." (Kasanin and Crank[40], pp 1180-1181)

The disease typically runs a rapid course, ending in death in from two to ten years, the average being about four years Occasional remissions are noted, however The reason for this early and rapid neural degeneration is not known, apparently age is only one of the major factors involved Treatment is limited to routine measures and custodial care

2. *Pick's disease* is even more rare than Alzheimer's disease It was first described by Arnold Pick of Prague in a series of papers published in 1892 Twice as many women as men are affected (Jervis[35]). The onset of the disorder is slow and insidious, involving difficulty in thinking and concentration, easy fatigability, and often character changes, with a lowering of moral inhibitions and an inability to adjust to new situations At first the cerebral atrophy is rather cir-

cumscribed, as it becomes more severe, the mental deterioration becomes progressively greater and focal cortical lesions are reflected in aphasia and apraxia The disease runs a slow, progressive course over a period of two to fifteen years At present, the causation of the disorder is unknown, and treatment is primarily a matter of custodial care

In contrast to the tendency to overactivity, emotional distress, and agitation in Alzheimer's disease, there are usually tendencies toward apathy and loss of initiative in Pick's disease. In addition, memory defect occurs later and is less pronounced as compared with the more global and rapid deterioration in Alzheimer's disease The actual brain pathology in the latter is a much more diffuse and noncircumscribed type of atrophy.

The following case shows the symptomatology in Pick's disease

"A D, a white, married male, 48 years of age, was admitted to the Psychiatric Institute May 29, 1945 He had been well until Sept, 1944, when he was discharged from the job he had held as a garment cutter for 20 years because he began to make errors in his work He became confused and forgetful, disoriented for time and place, and suffered a deterioration in his intellectual functions and a change in personality

"The patient was born in Italy He came to the U S at the age of 14 and was married at 28 He had two adolescent daughters He was described as a charming, agreeable person able to make and keep friends He was kind, considerate, affectionate, and well adjusted in his marital relations About 6 months prior to admission he manifested no sexual desire The patient's mother, now deceased, is said to have had an illness similar to his About the age of 40 she became confused and would wander away from home One brother is now senile and is occasionally confused and forgetful

"In Sept, 1944, it was noticed while at work that the patient, in cutting garments from patterns, was cutting all backs and no fronts In Oct, 1944, he became confused and forgetful He was disoriented for time and place There was no concomitant change in the patient's emotional expression He did not appear to be depressed or agitated and had no crying or weeping spells He tried to find another job but could not carry out the simplest tasks His judgment became markedly impaired. He would drive through red lights without exhibiting any reaction He was unable to repeat telephone messages correctly Table manners became poor and he was indifferent to food, eating anything that was placed before him Cooking had previously been his hobby but now he was unable to indulge this pleasure because he could not assemble the proper ingredients or carry out the instructions of the recipe

"Mental examination revealed him to be confused and bewildered His verbal productivity was markedly diminished with a prolonged reaction time in responding to questions He exhibited very little emotional reaction except for mild anxiety and tension when asked a question which he could not answer His thought content was extremely meagre Sensorium was seriously involved in all phases, and insight and judgment were very poor A Rorschach test showed a personality markedly affected by a cerebral organic disorder with indications of involvement of the frontal lobes

" Neurological examination was essentially negative with no aphasia, apraxia, or other focal neurological signs X-ray of chest and skull revealed no abnormalities An EEG taken on June 5, 1945, manifested low amplitude alpha activity exhibiting slight irregularities in contour consistent with chronic atrophy A pneumoencephalogram done on June 27, 1945, showed both lateral ventricles and the third ventricle well filled with air There was slight dilation of the lateral ventricles, suggesting right cerebral atrophy There was also air in the basal cisterns and in the cerebral sulci These latter were moderately dilated. The roentgenographic impression was a moderate, bilateral cerebral atrophy or hypoplasia At this point a diagnosis of presenile psychosis, Pick's disease, was made

"The course of the patient was a steady deterioration. He was markedly disoriented for time and place. His recent memory was very much affected and he could not remember things done a few hours ago. He seemed confused and bewildered most of the time He was unable to dress himself and required constant nursing care and supervision On several occasions, at night, he put his street clothes over his pyjamas and then got into bed His eating habits were very poor and he spilled food over himself His basic emotional attitude was one of dullness, lack of initiative, with no drive This was occasionally punctuated by irritability, restlessness, and depression, which became especially apparent when he was confronted with tasks which he could not perform" (Polantin *et al*[68], pp. 96-97)

PSYCHOSES WITH CEREBRAL ARTERIOSCLEROSIS

Psychoses with cerebral arteriosclerosis are very similar to senile psychoses in both anatomical and behavioral symptoms The neural pathology in arteriosclerosis involves a "hardening" of the larger arteries of the brain Large patches of fatty and calcified material appear in the inside layers of the blood vessels and gradually close down the arterial channel Circulation becomes sluggish or blocked altogether in certain arterial pathways, and may lead to inadequate cerebral nutrition Over a period of time this faulty nutrition may result in a large area of softening where the brain tissue has degenerated In other cases the hardening and degeneration of the arterial walls may result in a lesion or hemorrhage, which then exerts considerable intracranial pressure, destroys fiber tracts in the white matter, and prevents adequate circulation and nutrition

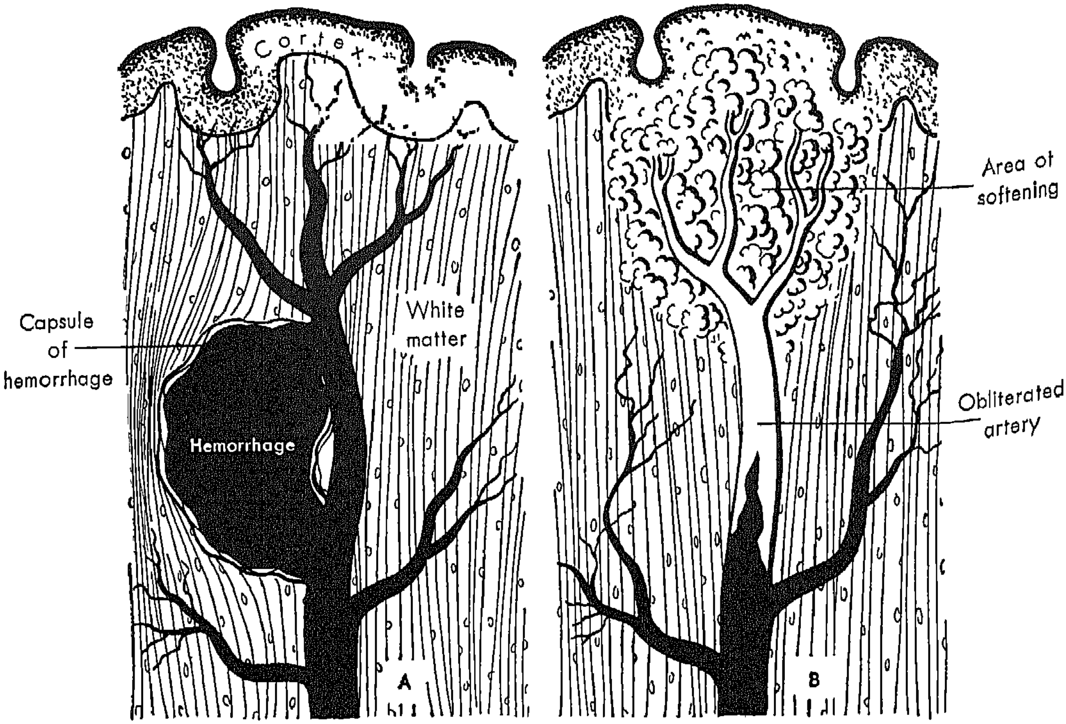
Psychosis associated with cerebral arteriosclerosis has become one of our major contemporary health problems, constituting approximately 12 per cent of the first admissions to mental hospitals. Although the disorder may occur any time after late middle life, the median age at first admission is approximately 69 5 for both sexes * The incidence for the two sexes is also about equal, although males slightly outnumber females. In the United States this disorder seems to occur more frequently among persons of low socio-economic level, although it is by no means restricted to any one economic group

Arteriosclerotic patients do not, in general, show the profound physical and mental deterioration found in the senile patient, and they frequently evidence considerable insight into their condition, which only serves to increase their worries. As in other organic psychotic reactions, the symptoms in cerebral arteriosclerosis vary considerably depending upon the nature and extent of the brain damage and the personality of the patient before his illness.

The onset of symptoms in cerebral arteriosclerosis may be sudden or gradual. Rothschild[76] reports a sudden onset, or "stroke," in more than half of his cases Sudden attacks apparently indicate either blocking of an artery or a hemorrhage, and patients show marked clouding or loss of consciousness, disorientation for time and place, incoherence, and temporary paralysis of one side of the body (Karnosh and Zucker[39]) Rothschild reports hemiplegia in about half of his cases. Total blocking of an artery is more apt to occur at night while the patient is asleep or after a heavy meal Hemorrhage in the brain is more apt to occur when the patient is excited, hard at work, or straining at stool.

When the onset of the disturbance is gradual, hospitalization may not be necessary until as much as two years following first appearance of the symptoms Clow[10] reports a gradual onset in 83 out of 100 patients with a median time of one year and nine months from the onset of such symptoms as periods of confusion, emotional lability, memory

* Malzberg[56], however, states that a psychosis with cerebral arteriosclerosis is most likely at age 60 among males and 56 among females This conclusion is based upon statistics for New York State and does not conform to federal reports on first admission of such patients to mental hospitals



Adapted from Karnosh and Zucker[30]

The two chief causes of cerebral arteriosclerosis are hemorrhage (left) and blocking (right) in the cerebral arteries. Both impair circulation and may lead to a softening or other deterioration of the parts affected.

defects, and poor judgment until the time of hospitalization. This type is clinically very similar to senile dementia. There is impaired memory, the degree of which may be obscured by confusion, increased irritability, restlessness, and gradual intellectual impairment The patient's attention and interest decrease, capacity for work falls off, and there is a loss of initiative. The patient may display impaired judgment and generally aggressive, quarrelsome behavior Frequently there are depressed feelings, associated with a fear of failing physical and mental powers, as well as weakness, fatigue, and various unpleasant somatic sensations. Outspoken suicidal tendencies are common. Emotional instability may be associated with a tendency to easy, unprovoked weeping and a general emotional lability

The more severe symptoms in cerebral arteriosclerosis are frequently preceded by headache, dizziness, vague somatic complaints, and a general period of physical and mental letdown. Aphasias, apraxias, apoplectiform attacks, and convulsive seizures may also precede the mental disturbance, or they may occur at the same time or later on in the course of the illness (Rothschild[76])

The course of arteriosclerotic disorders varies greatly from patient to patient, and the symptoms may vary considerably from one time to another in the same patient. Acute attacks, associated with marked neurological damage and accompanied by a state of confusion and delirium, may rapidly lead to a fatal outcome. According to Rothschild's[76] findings, about half such cases terminate in this way; in the other half, the severe symptoms subside, leaving the patient with a varying amount of intellectual impairment. The remissions may last for months or even years and are then terminated by another acute attack from which the patient may or may not recover In the meantime, general mental efficiency becomes progressively affected, irri-

tability and hypochondriacal concern increase, and despite improvement in symptoms from time to time, the picture is one of gradual deterioration. The attacks become increasingly severe, and the patient may develop a permanent hemiplegia and be bedridden for many months. In some cases there may be frequent fluctuations between periods of confusion and restlessness and periods of quiescence Death usually occurs from pneumonia, heart failure, or extensive cerebral accidents

"A chemist, age 66 years, had for several years been greatly worried about the condition of his invalid wife to whose care he gave much effort For a year it was noticed that he had become greatly concerned over trifles He had written rambling letters He slept poorly Ten days before admission he became abruptly worse, was incoherent in his speech and had periods of mental confusion especially at night He developed a delirium in which he believed that there were microphones in the house He wandered outside without clothing He believed that he had been drugged by a burglar and later said that he had been hit over the head with a blackjack There was no history of drug medication . .

". . The patient himself had been a healthy, sturdy child He was exceptionally bright in school, graduated with honors and became well known in his profession He was a tireless worker with practically no outside interests His personality was described as efficient, methodical and rigid He was well adjusted to marriage He abstained from alcohol and smoked very little He gave up most of his work to prepare an ambitious treatise on chemistry At 59 he had been nervous for several months supposedly because of overwork His physical health had been good until 63 when he was found to have auricular fibrillation This improved with digitalis

"On admission to the hospital he was mildly agitated, showed a gross attention defect, was confused, vague, dreamy, delusional and rambling in his speech He had an aphasia marked by inability to combine words properly to explain himself He had a marked defect in his ability to recall recent events Emotionally he was depressed and at times irritable and childish

"Physically he showed definite peripheral and retinal arteriosclerosis His blood pressure was 184/136 His heart was enlarged and fibrillating although there was no evidence of decomposition He had a coarse tremor of his hands His reflexes were normal. He had chronic nephritis His blood chemistry was normal and his blood Wassermann was negative

"His treatment consisted of rest, massage, digitalis, fluids and food, enemata for his severe constipation He required much encouragement and reassurance. Nine days after his admission his aphasia had disappeared but he continued apprehensive and he had a memory defect He was greatly worried over his elimination. Physically much stronger, his interests were stimulated in occupation and in modified gymnasium work He greatly enjoyed his associations with the other patients, saying he had formed more friendships in the hospital than he had for the previous ten years Two months after admission he had recovered complete insight After another month's convalescence he was discharged as recovered He had no apparent residual mental symptoms

"This man continued well and productive for three years, resuming work on his chemical treatise and adjusting to the death of his wife He remarried three years after discharge but soon became more irritable, forgetful and fearful and at his own request was readmitted to the hospital in a confused state of mind three and one half years after his first discharge He again improved in three and one half months but this time with considerable residual memory defect He was reported to have died of pneumonia six years after at the age of 75" (Clow[16], pp 16-26)

Clinical aspects of senile and cerebral arteriosclerotic psychotic reactions are so much alike that a differential diagnosis is frequently very difficult to make. In some cases there is a mixture of the two disorders—a senile re-

action may be superimposed upon an arteriosclerotic condition or vice versa Rothschild[76] states, however, that mixed reactions are not nearly so common as might be anticipated. Usually one or the other condition predominates, and approximately equal clinical admixtures seldom occur

Among the clinically distinguishing features of these two disorders is the fact that senile psychoses usually occur later in life and last longer Also, although both conditions may be ushered in with a sudden attack of confusion or delirium, senile reactions are usually gradual and progressive, while arteriosclerotic reactions more often run a brief and stormy course ending in death There is more pronounced intellectual impairment in senile dementia and paranoid patterns are more common There are also more pronounced fluctuations in the symptoms of cerebral arteriosclerosis and more transient neurological signs Finally, there are several symptoms common to the arteriosclerotic group which are less commonly observed in senile psychoses tendencies to hypochondria and depression, headaches, dizziness, apoplectiform and convulsive seizures, and strong emotional outbursts But although these differences are observable in early and intermediate stages, all patients become very much alike with progressive intellectual deterioration

DYNAMICS IN OLD-AGE PSYCHOSES

Early psychiatrists, in accord with the trend of the times, seized upon the obvious damage to the brain as the only factor of importance in the causation of both senile and cerebral arteriosclerotic reactions But with the increased interest and attention that has recently been devoted to mental disturbances in old age, these early beliefs have undergone considerable revision. Thus, although cerebral damage alone, when sufficiently extensive, may produce marked mental symptoms, it has become evident that in most cases the anatomic changes are only one set of interactive factors in a total picture in which the personality organization of the individual is also of primary importance

Woltman[97] has found little correlation between the extent of pathological changes and the clinical disability The same damage which is associated with a psychosis in one patient may yield no psychotic symptoms in another, some patients with only mild mental symptoms reveal extensive cerebral damage while others with mild cerebral damage may show severe mental deterioration. Apparently the tissue damage in itself does not produce a chronic psychosis. for a psychosis to develop, the individual must also be lacking in capacity to withstand or compensate for such damage Accordingly, our next problem in searching for causative factors is to examine what predisposing factors help one to withstand brain damage, and what factors make psychotic reactions more likely.

Biological factors. In any psychosis there is always a search for possible hereditary or constitutional predisposing factors In a study of 78 cases of senile psychosis and cerebral arteriosclerosis, Post[70] found that 12 cases revealed a previous psychosis in the family, there was a family history of strokes without psychosis in 7 families, and in 25 cases various mental and neurotic disorders were present in patients, siblings, or near collateral blood relatives In 100 cases of arteriosclerotic psychoses, Mayer-Gross[78] found a marked family background of cardiovascular and senile diseases, as well as many cases of manic-depressive heredity and depressive attacks among the patients themselves earlier in their lives. Such evidence, of course, only indicates the possibility of hereditary or constitutional predisposing tendencies and is not to be taken as conclusive evidence of such tendencies, many other factors have not been taken into account However, there is every reason to believe that hereditary potentialities would play a role of some importance in such reactions

We have already mentioned certain physiological conditions associated with senile and arteriosclerotic psychotic reactions In both

there is faulty circulation in the brain with actual deterioration of the brain cells. Other organic factors often involved are hypertension, diminished oxygen consumption, avitaminosis, and toxic conditions resulting from the excessive use of barbiturates.

Most old people have high blood pressure. However, the precise relation of high blood pressure to the appearance of mental symptoms in the aged, particularly in the less severe cases, has not yet been clearly worked out. Kennedy and French[42] have advanced the belief that aging is essentially a matter of defective nutrition and oxygenation, the supply of oxygen to the cells of the nervous system determining their energy, longevity, and health. Therefore, when devascularization and hypertension appear in the nourishing blood vessels, the nervous system, including the brain itself, is adversely affected. But in view of the ability of so many individuals to compensate for considerable cerebral damage, the significance of hypertension and diminished oxygen consumption in the total picture is not clear. And in many cases the persistent high blood pressure itself is of affective origin. Thus faulty emotional patterns indirectly make for earlier aging.

Nutritional deficiencies apparently play an important role in a few cases. The condition of a number of patients has been dramatically improved with the administration of large dosages of vitamins, particularly thiamine chloride, nicotinic acid, and liver extract. In most cases the patients had been hospitalized in a state of acute confusion or delirium, with symptoms similar to senile dementia. Wexberg[93] considers this evidence of a new syndrome, which he calls *senile encephalomyelitis*. Other authorities, however, continue to refer to this condition as *senile psychosis* (or *arteriosclerosis*) *with avitaminosis,* rather than as a separate syndrome.

Some investigators have pointed out that in certain cases, delirious states in old age are of a toxic nature and may be due to the excessive use of barbiturates or bromides which have been given for insomnia. But there is little evidence that this applies to more than a very few patients (Rothschild[76]). Many patients are in extraordinarily good health until the onset of the mental disorder.

Studies of the brain waves of senile and arteriosclerotic patients reveal that approximately one third do not show any definite abnormality in brain waves (Liberson[53]). Patients with pronounced symptoms of confusion and irritability tend to have markedly abnormal brain waves, whereas patients showing pronounced anxiety, agitation, and delusions tend to normal or borderline tracings. We do not know why organic lesions do not produce abnormal tracings when associated with anxiety, agitation, and delusions.

Psychological factors. It has been said that next to dying, our recognition that we are aging may be the most profound shock we experience in our lifetime. Important as the actual brain changes are, the psychoses of old age seem to be very largely controlled by psychological factors.

1. *The role of the pre-psychotic personality.* The pre-psychotic personality of the senile patient seems to be a more basic factor in the development of his psychosis than any of the factors considered thus far. The majority of the more recent writers agree that an individual's personality determines whether or not he can adjust to and compensate for the unfavorable internal and environmental conditions that arise and hence whether or not a psychosis develops (Rothschild[76]).

Out of 79 cases of senile dementia and cerebral arteriosclerosis studied by Post there was evidence of a high incidence of abnormal traits in the previous personality (Post[70]). Only 30 of the 79 were described as having been satisfactorily adjusted individuals. In 27 cases several unhealthy mental traits were recorded, with a strikingly high incidence of the so-called "obsessional trends," including rigidity of outlook, obstinacy, narrowness of interests, overconscientiousness and bigotry, and a generally poor adaptability to social

surroundings. There also appeared to be a positive and definite correlation between the *severity* of an individual's later psychotic symptoms and his previous maladjustive tendencies.

Wagner[89] has noted that the mental confusion, evasion of reality, and even mild hallucinations in the aged can often be demonstrated to be intensified forms of similar refusals in youth and middle age to face life's problems and to come to grips with the realities of day-to-day existence Rothschild[76], too, has found that individuals who are in any way handicapped psychologically are especially vulnerable to psychoses in old age The pre-psychotic personalities in a considerable number of his patients were inadequate and unstable, displaying such characteristics as seclusiveness, odd and eccentric traits, restricted interests, aggressiveness, violent tempers, and shiftlessness Such individuals apparently break down in the face of damage which persons of a more stable make-up successfully withstand As we have pointed out, very extensive cerebral changes may produce abnormal behavior in anyone, but the anatomic factor does not seem to be all-important in most cases.

2. *Situational stress* An older person faces numerous very real fears and insecurities that have not plagued him in his more hale and hearty earlier years In fact, the unfavorable environmental circumstances of older people are often quite as potentially hazardous to their general mental health as are the organic changes Even well-integrated personalities may break down under the combined assault of the cerebral changes and the severe situational stress.

a) Fear of dependence and feeling of uselessness Among the many situational stresses of old age is that of unemployment and the various problems to which it gives rise Barring some exceptions in the professional classes, the aging individual in this country is usually faced with the specter of retirement from his job. This may very possibly mean that he will have serious financial problems and worry But even aside from these, retirement means that the individual is deprived of the activities which have occupied most of his time, and he is required to make a sudden adjustment to a very different life with a great deal of leisure time

In addition, the common expectation is that after 60 the individual's practical usefulness is about over Indeed, a feeling of uselessness and unimportance is often fostered by the younger adults in the family, who may assume a patronizing and protective attitude toward the aging parent These factors, as much as any organic changes, may foster impairment of memory for recent events, a trait so often noted in the aged. We know that attention is important to memory, and with a general feeling of uselessness, inadequacy, and frustration, there may be a withdrawal of attention from the details of the present Mental deterioration of the individual may actually be hastened by his children's attitude as they take over management and direction of the family and in other ways deprive him of responsibility and freedom and an important place in the scheme of things. Such conditions are aggravated when the old person is financially dependent.

The problem of old age has caught us largely unaware We have not provided in our society ample conditions for utilizing the experience and wisdom of our old people or even conditions necessary for them to continue their life span in reasonably respected and useful positions Old age does not bring increasing respect in our culture, as it does in some, but usually quite the opposite. An urban, highly industrialized society often has no more room for old people than it has for children The aged person may feel that he is unwanted and is bossed about or ignored by his children, and he may be right. It is easy to understand how such a person may become irritable and suspicious and even develop delusions that he is being robbed or that his death is desired Thus during this

difficult period of retirement from active life it is particularly important that an individual be spared unnecessary stresses that may lead to avoidable emotional and intellectual let-down and deterioration (Henderson[31]).

b) Fear of invalidism. Still other stresses are becoming important during this period of life. The general physical degeneration and the increase in insidious and chronic diseases quite naturally lead to the increased preoccupation with bodily functions and the worry over possible failing health that are so characteristic of older people. This is particularly true if the individual's failing health or chronic illness may involve expensive medication or possible incapacitation and loss of work, with resultant financial worries.

c) Isolation. Finally, as the individual grows older he is faced with the bitter realization that contemporaries are dying one after the other. It is hard to make new friends in younger groups, and the elderly person is left more and more alone. Particularly is this true of women, who generally outlive their husbands by five years or more. The loss of a spouse presents a highly difficult adjustment problem and adds to feelings of loneliness and isolation. Old people are often afflicted with varying degrees of deafness; this too may lead to feelings of isolation and suspicion.

In view of all these very real ills attendant on old age, it is small wonder that so many old people, especially those of limited education, narrow their field of interests and become more introspective and querulous. With many notable exceptions, old people as a group tend to be conservative and somewhat intolerant in their outlook. Feeling insecure and inadequate, they seem to find a sense of security and support in long-established beliefs and practices. There appears to be an emotional need to find the world stable, unchanging, and predictable, just as the infant finds his relatively well-organized and protected world to be. Since many older people actually lack the neurological equipment for major adaptations, any new situation or problem which interferes with their well-established adaptive patterns is potentially catastrophic and may lead to severe anxiety, irritability, and general emotional upset. This is especially likely if the individual has always regarded the world as a somewhat threatening and insecure place.

An 80-year-old married woman had always enjoyed excellent health, and apart from friction with her husband over his alcoholic habits had a personal history of satisfactory adjustment. However, during the depression years of the early thirties, increasing financial difficulties occurred and the patient was forced to sell her house, which she had inherited from her father and in which she had lived all of her life. The patient's husband was sent to a town infirmary and she went to live with relatives. Previous to this time she had appeared much younger than her actual age, but the breaking up of her home upset her very much, and she seemed to "go to pieces" very rapidly thereafter. She could not understand why she had to leave her home, her memory became very poor, and she became feeble physically. She grew irritable, showed an obvious dislike for her surroundings, and failed to recognize her relatives. She became restless, shrieked a great deal, and was finally brought to the State Hospital. Examination of the patient confirmed earlier observations of marked impairment of memory, disorientation, and an irritable and scolding attitude. Once she stated that she was young and had been recently married; in general the picture was one of intellectual deterioration. The patient rapidly grew weaker, developed bronchopneumonia, and died two months after admission. Post-mortem examination revealed typical senile atrophic changes of moderate severity. (Adapted from Rothschild[76], p. 779)

In his discussion of this case, Rothschild pointed out that the course of the senile dementia here was very rapid and the intellectual impairment very severe. He also pointed out that the senile alterations had

evidently been occurring over a period of years, but that the patient had remained mentally normal until a new and difficult situation had arisen which lowered her resistance so greatly that she was then unable to compensate adequately for the cerebral damage. Apparently the situational stress acted as a crucial factor in upsetting the equilibrium that she had been able to maintain until that time.

This point is well illustrated by the case of a 79-year-old professional man who was admitted for treatment as a result of a severe state of anxiety, depression, and indecision. The rather unusual course of this case is summarized below.

The patient's disorder was apparently precipitated by his retirement from the firm for which he had worked for over 40 years. In the course of his hospitalization, the patient evidenced little improvement until the hospital received a letter from his firm inquiring about his condition. They were experiencing difficulty without him and needed his help. Upon receipt of the news the patient showed marked improvement. He was given a leave of absence and returned to his old job. A follow-up study a year later revealed that he was handling his responsibilities with unimpaired judgment, appeared younger, showed good stamina, and reported regularly to work at the age of 80.

d) Progressive loss in sexual functions. The Freudian interpretation of the aging process stresses a reversal of the infancy-to-childhood-to-adulthood growth, with an increasing tendency toward psychosexual regression (Cowdry[17]). This begins at the *climacteric* because of a frustration of sexual satisfaction through contact with members of the opposite sex. These frustrations may be due to endocrinological changes, to changed environment such as death of the spouse, or other reasons, but the individual who feels incapable of overcoming them tends to depend increasingly on the infantile satisfactions of self-stimulation. These include not only masturbation but a preoccupation with body sensations in general, eating, sleeping, urination, and defecation become life's pleasures and chief concerns.

Although Kinsey's[44] findings indicate that there is a gradual decrease in sexual activity with increasing age rather than any abrupt cessation, older people often dread this termination of one of their main physical and emotional satisfactions. Consequently, there are often highly stressful fears in old age centering around loss of sexual potency and accompanying loss of sexual attractiveness.

Sociological factors. The significance of certain social and sociological factors in senile psychoses and cerebral arteriosclerosis is a matter of considerable speculation. As we have seen, Carothers[15] found a high rate of senile psychoses among Kenya Africans but no cerebral arteriosclerosis at all, possibly because their culture is so free from the tensions that cause high blood pressure.

Within our own society, statistics indicate that for both senile dementia and arteriosclerosis the urban rate of first admissions to mental hospitals is approximately twice as high as the rural rate. But we do not know how far this indicates that urban living, with its faster pace, noise, crowds, and excitement, is more conducive to the development of these disorders than rural living and how far it simply means that more patients are cared for at home in rural areas.

In summary, we can see that it is the nature and extent of the organic damage and the personality of the individual, coupled with other stress factors, that determine his overall reaction. This is merely another way of repeating our basic principle that the individual responds as a bio-psycho-sociological unit.

THERAPY, PROGNOSIS, AND PREVENTION

Whether or not to hospitalize aged psychotics is a problem, complicated by the present crowded conditions of most mental hospitals and the fact that some older patients

can make a better adjustment at home In the initial stage of a psychosis the patient may be in such poor general physical condition that hospitalization is necessary in order to assure adequate food, sleep, and medication. But many authorities consider hospital care as a last resource, feeling that the sudden change in environment and manner of living is too hard on the older patient and may lead to a feeling of hopelessness and complete letdown In mild cases he may be better off in his own household, where he can be with his own friends and follow a familiar routine

Patients manifesting marked confusion, restlessness, violent and noisy behavior, depressive tendencies, and antisocial behavior, such as making sexual advances to children, usually require institutionalization. This may also hold true for patients who have a tendency to roam and get lost and who present serious nursing problems, such as extremely untidy elimination habits or extreme restlessness Regardless of the merits of the procedure for a given case, however, there seems to be a growing tendency to send aged patients to mental institutions This results, apparently, not so much from a desire to commit them as from the lack of facilities for adequate care in the average home or in boarding homes

At the present time therapy for the senile patient leaves much to be desired This is due partly to a lack of facilities and trained personnel, and partly to a lack of adequate understanding concerning the disorders of later life. Psychoanalysis is almost never used with older people; on the whole they have been regarded as being too rigid and too deeply structured in their personality make-up to be subject to change Freud himself did not believe that old people could be psychoanalyzed successfully It cannot be denied that the aging organism has a diminished capacity to repair itself and a certain lack of adaptability that comes with brain damage

What kind of therapy is available, then, for senile dementia and cerebral arteriosclerosis? Various treatments are suggested, but they all fall into the category of palliative therapy, which is to say a treatment of symptoms rather than of underlying causes With our present lack of knowledge about the aging process this is about all that can be hoped for in more severe senile cases

Practical aspects of treatment include the provision of comfortable surroundings, interesting and worth-while activities and interests, the alleviation of stress situations in so far as possible, and medical treatment or removal of any sources of toxic infection such as tonsils and sinuses Attention is given to simple hygienic measures such as proper clothing, an adequate diet, regularity of bowel movements, and all conditions which may improve the general physical health of the patient In addition, the patient must be protected from the danger of physical injury resulting from falls or the faulty use of matches, and from foolish financial transactions and other matters where harm might result from his poor judgment This type of treatment very often relieves the patient's main outward symptoms, and may permit his return home and the resumption of many of his normal activities In the great majority of cases, however, it is not likely to help him to do any more than vegetate quietly until overtaken by death Special treatment is sometimes involved, such as sedation in agitated cases, massage in hemiplegia, and so on. Shock therapy is occasionally used on certain types of cases, but the physical condition of most patients makes this treatment dangerous

The prognosis in cases of senile and arteriosclerotic psychotic reactions is not favorable, for the cerebral damage and other clinical symptoms seem to be irreversible, once the psychosis is well under way Contrary to popular belief, however, the prognosis is not completely hopeless There have been a few recent reports of successful treatment of mental disorders of the aged, and often, even

without a complete recovery, these patients may be returned to their homes in a more manageable state of mind

Rothschild[77] has suggested the need for further investigation of the efficacy of intensive treatment in the earliest stages of the disorder, employing modern psychotherapeutic techniques Most patients come to hospitals in relatively advanced states without having had even a minimal amount of psychiatric guidance.

In a study of 683 patients over 65 years of age who were first admitted to the State Mental Hospitals in Maryland during the years 1938-1940, Camargo and Preston[14] found that 82 per cent of all discharges occurred in the first year after hospitalization Apparently, if the patient fails to show rather immediate improvement, there is very little expectation that he will improve later on

Follow-up studies showed that at the end of five to six years, 77.8 per cent of the patients admitted in 1938 had died, 10 4 per cent were discharged, and only 11 7 per cent remained under hospital care. The death rate was higher for male patients (73 per cent in three years) than for female patients (59 per cent in three years) In terms of general expectations, it would appear that at the end of five years, less than 15 per cent of the patients will still be in the hospital Life expectancy for these patients is considerably less than that of the same age group in the general population, although Pollack[69] found that 70 per cent of patients with cerebral arteriosclerosis reached an age over 67 years

Recent medical advances in the amelioration of high blood pressure and hardening of the arteries may prove of great preventive as well as therapeutic value in the psychoses of the aged However, the full significance of current findings is not yet clear Preventive planning may also involve the adjustment of the many aspects of our family and cultural life which are particularly hazardous psychologically to the aged

In 1921 Dr Lillian J Martin (1851-1943), at the age of 70, made a historic contribution to the theory and practice of preventing old-age psychoses by establishing an old-age clinic in San Francisco. She saw the need for making the present day-to-day living of old people more stimulating in order to combat their tendency to reverie and mental deterioration (Lawton[49]) In her clinic each client was given a short battery of tests in order to gain a qualitative picture of his interests, strengths, and weaknesses in relation to mental, emotional, and social deterioration. This testing program was admittedly superficial, but the clients of this agency were all considered to be relatively normal The client was then given nineteen questions such as those below to be considered each day for a week.

1 Have I worked toward my goal today?
2 Have I tried to solve rather than forget my problems today?
3 Have I taken attention exercises today?
4 Have I controlled my reveries today?
5 Have I been a complete participator in family and community life today?

After the patient completed these exercises for mental rehabilitation, he was inducted into some kind of group activity, depending upon the diagnosis made from his life history and test results The chief groups were educational, social, economic, political, religious, and aesthetic Dr Martin emphasized in this respect the necessity of continuing these social activities for a considerable time so that older persons might learn to function habitually on the higher level which they have attained Otherwise they may become discouraged and revert to reverie and other undesirable compensatory activities.

Through such clinics and guidance centers, aging people can be helped to understand their problems, accept and use their decreased potentialities, and improve social relations with their contemporaries, thus retaining significance in a world which is thrusting them aside. Various types of occupational therapy and adult study clubs can be carried on

through these centers which offer old people an opportunity to develop new interests and make new friends, providing constructive activities with which to fill in their time and making possible the satisfaction of basic needs. (See page 580) The potentialities of group psychotherapy for helping to alleviate feelings of isolation and work through individual problems have not yet been fully explored but appear most promising.

REFERENCES

The reference list includes not only the sources from which the author has drawn material, but acknowledgments of the permissions granted by authors and publishers to quote directly from their works

1 Aita, John A and Reitan, Ralph M "Psychotic Reactions in the Late Recovery Period Following Brain Injury" *American Journal of Psychiatry,* CV(1948), 161-169

2 Arluck, Edward W "A Study of Some Personality Characteristics of Epileptics" *Archives of Psychology,* CCLXIII(1941), 5-77

3 Bender, Lauretta "Genesis of Hostility in Children," *American Journal of Psychiatry,* CV (1948), 241-245

4 Bennet, A E "Psychiatric Aspects of Head Injury" *Diseases of the Nervous System,* VII (1946), 89-92

5 Biddle, W Earl, and Van Sickel, Mildred *Introduction to Psychiatry* Philadelphia Saunders, 1948

6 Bond, E D and Smith, L H "Post-Encephalitic Behavior Disorders A Ten Year Review of the Franklin School" *American Journal of Psychiatry,* XCII(1935), 17-33

7 Borman, Milton C "Carbon Monoxide Poisoning" *American Journal of Psychiatry,* VI(1926-1927), 135-143

8 Born, Wolfgang "Great Artists Who Suffered from Mental Disorders" *Ciba Symposia,* VII (1946), 223-233

9 Brickner, R M *The Intellectual Functions of the Frontal Lobes* The Macmillan Company, 1936 Used by permission of the author

10 Brock, S *Injuries of the Skull, Brain, and Spinal Cord* Baltimore Williams and Wilkins, 1943

11 Brown, A W., Jenkins, R L, and Cisler, L E "Influence of Lethargic Encephalitis on Intelligence of Children as Determined by Objective Tests" *American Journal of Diseases of Children,* LV(1938), 304-322

12 Brozek, Josef, Guetzkow, Harold; and Keys, Ancel "A Study of Personality of Normal Young Men Maintained on Restricted Intakes of Vitamins of the B Complex" *Psychosomatic Medicine,* VIII(1946), 98-109

13 Byrd, Richard E *Alone* New York Putnam, 1938, 175-190 (excerpts)

14 Camargo, O and Preston, G H "What Happens to Patients Who are Hospitalized for the First Time When Over 65 Years of Age" *American Journal of Psychiatry,* CII(1945), 168-173

15 Carothers, J C "A Study of Mental Derangement in Africans, and an Attempt to Explain Its Peculiarities, More Especially in Relation to the African Attitude to Life" *Journal of Mental Science* XCIII(1947), 548-597

16 Clow, H E "A Study of One Hundred Patients Suffering from Psychosis with Cerebral Arteriosclerosis" *American Journal of Psychiatry,* XCVII(1940), 16-26

17 Cowdry, Edmund V (ed) *The Problem of Aging, Biological and Medical Aspects,* Baltimore. Williams and Wilkins, 1939

18 Dayton, N A and Malamud, W *Mental Disorders of the Aged Arteriosclerotic and Senile Psychoses* Public Health Reports, Supplement No 168 Washington, D C (1942), pp 104-117

19 Doty, Edwin J "The Diagnosis and Treatment of Delirious Reactions" *Medical Clinics of North America,* May 1948, 647-654

20 Ebaugh, F G and Brosin, H W "Traumatic Psychoses" *Annals of Internal Medicine,* XVIII (1943), 666-696

21 Fairweather, D S "Psychiatric Aspects of the Post-Encephalitic Syndrome" *Journal of Mental Science,* XCII(1947), 201-254

22 Falk, R, Penrose, L S, and Clark, E A "The Search for Intellectual Deterioration Among Epileptics" *American Journal of Mental Deficiency,* XLIX(1945), 469-471

23 Fetterman, Joseph L *Practical Lessons in Psychiatry* Springfield, Ill Charles Thomas, 1949

24 Freuchen, Peter, *Arctic Adventure.* New York· Rinehart and Company, Inc 1935

25 Goldstein, K *After Effects of Brain Injuries in War* New York Grune and Stratton, 1942

26 Gorman, Warren F and Wortis, S Bernard "Psychosis in Addison's Disease" *Diseases of the Nervous System,* VIII(1947), 267-271 Reprinted by permission of Physicians Postgraduate Press

27 Greenwood, James "Surgical Results in Benign Brain Tumors" *Diseases of the Nervous System,* LX(1948), 362-364

28 Gunther, John *Death Be Not Proud* New York Harper Copyright 1949, by John Gunther

29 Hardwick, S W "The Role of Vitamin Deficiency in Nervous and Mental Disorders" *Medical Practice,* CCXIX(1948), 219-226

30 Harlow, J M "Recovery From the Passage of an Iron Bar Through the Head" *Publications of the Massachusetts Medical Society,* II(1868), 327

31 Henderson, D K "The Early Diagnosis and Treatment of Senile Mental Disorders" *Practitioner,* CXLIX(1942), 1-6

32 Himler, Leonard E and Raphael, Theophile "A Follow-up Study on 95 College Students with Epilepsy, Ann Arbor, Michigan" *American Journal of Psychiatry,* CI(1945), 760-763

33 Hoch, Paul and Knight, Robert P *Epilepsy* New York Grune and Stratton, 1947

34 Hunter, Harriet "The Treatment of Epilepsy" *Diseases of the Nervous System,* IX(1948), 200-203

35 Jervis, G. A "The Presenile Dementias" In *Mental Disorders in Later Life* (Oscar J Kaplan, ed) Palo Alto, Cal Stanford University Press, 1945

36. Johnson, N A "The Growing Problem of Old Age Psychoses An Analysis of the Trend in One State Hospital from 1910 to 1944" *Mental Hygiene,* XXX(1946), 431

37 Juvenal, *Satires* Loeb Classical Library Harvard University Press (G G Ramsay, tr)

38 Kaplan, O J *Mental Disorders in Later Maturity* Palo Alto, Cal Stanford University Press, 1945

39 Karnosh, L J and Zucker, E M *A Handbook of Psychiatry* St Louis Mosby, 1945

40 Kasanin, J and Crank, R P "Alzheimer's Disease" *Archives of Neurology and Psychiatry,* XXX(1933), 1180-1181 Reprinted by permission of the American Medical Association

41 Kemble, James *Idols and Invalids* New York· Doubleday, 1936

42 Kennedy, Foster and French, T *Borderline Mental Problems in Late Maturity* Public Health Report, Supplement No 168 Washington, D C (1942), 6-21

43 Keys, Ancel, *et al The Biology of Human Starvation* Minneapolis The University of Minnesota Press, 1950.

44 Kinsey, Alfred C *Sexual Behavior in the Human Male* Philadelphia Saunders, 1948.

45 Klein, D B *Mental Hygiene* Boston Holt, 1944

46 Kolb, L, *et al The Psychiatric Significance of Aging as a Public Health Problem* Public Health Reports, Supplement No 168, Washington, D C (1942), 21-47

47 Kupper, Herbert I "Psychic Concomitants in Wartime Injuries" *Psychosomatic Medicine,* VII(1945), 15-21

48 Landisberg, Selma "A Personality Study of Institutionalized Epileptics" *American Journal of Mental Deficiency,* XL(1947), 16-22

49 Lawton, George *Psychological Guidance to Older Persons* U S Public Health Report, Supplement No. 168 Washington, D C (1942), 73-85

50 Lennox, William G "The Genetics of Epilepsy" *American Journal of Psychiatry,* CII (1947), 457-462

51 Lennox, William G and Davis, Jean P "Review of Psychiatric Progress" *American Journal of Psychiatry,* CIV(1948), 477-479

52 Levin, Sidney, "Brain Tumors in Mental Hospital Patients" *American Journal of Psychiatry,* CV(1949), 897-900

53 Liberson, W T and Sequin, C A "Brain Waves and Clinical Features of Arteriosclerotic and Senile Mental Patients" *Psychosomatic Medicine,* VII(1945), 30-35

54 Lidz, Theodore and Whitehorn, John C "Psychiatric Problems in a Thyroid Clinic" *Journal of the American Medical Association,* CXXXIX(1949), 698-701

55 Lisonsky, Edith Silverglied. "Convulsive Disorder and Personality" *Journal of Abnormal and Social Psychology,* XLIII(1948), 29-37

56 Malzberg, Benjamin "The Expectation of Psychoses with Cerebral Arteriosclerosis in New York State, 1920, 1930, 1940" *Psychiatric Quarterly,* January 1945, pp 122-128

57 McIntyre, Howard D and McIntyre, Aurelia P "The Problem of Brain Tumor in Psychiatric Diagnosis" *American Journal of Psychiatry,* XCVIII(1942), 720-726

58 Mayer-Gross, W "Arteriosclerotic, Senile, and Presenile Psychoses" *Journal of Mental Science,* XC(1944), 316-327

59. Menninger, Karl *The Human Mind* New York Alfred A Knopf, Inc, 1946

60 Menninger, W C *Journal of the American Medical Association,* XCV(1930), 1949

61 Merritt, H H "Head Injury Review of the Literature (Concluded)" *War Medicine,* IV (1943), 187-215

62 Noyes, A P *Modern Clinical Psychiatry* (2nd ed) Philadelphia Saunders, 1939

63 Olkon, David M *Essentials of Neuropsychiatry* Philadelphia Lea and Febiger, 1945
64 Parran, Thomas *Shadow on the Land.* New York Reynal and Hitchcock, 1937
65 Parran, Thomas and Vonderlehr, R A *Plain Words About Venereal Disease* New York Reynal and Hitchcock, 1941
66 *Patients in Mental Institutions* Washington, D C · U S Department of Commerce, 1947
67 Plater, Felix *Praxeos medical Tomi tres* (Basil, 1656) *Histories and Observations* London Culpeper and Cole, 1664
68 Polantin, Philip, Hoch, Paul H , Horwitz, William A , and Roizin, Leon "Presenile Psychoses" *American Journal of Psychiatry,* CV (1948), No 2
69 Pollack, H M "A Statistical Review of Mental Disorders in Later Life" In *Mental Disorders in Later Life* (Oscar J Kaplan, ed) Palo Alto, Cal Stanford University Press, 1945
70 Post, F "Some Problems Arising from a Study of Mental Patients Over the Age of Sixty Years" *Journal of Mental Science,* XC(1944), 554-565
71 Putnam, T J and Merritt, H H "SDH in Treatment of Convulsive Disorders" *Journal of the American Medical Association,* III (1938), 1068-1073
72 Pysey, William A *The History and Epidemiology of Syphilis* Springfield and Baltimore C C Thomas, 1933
73. Reynolds, Frank W , Mohr, Charles F , and Moore, Joseph E "Penicillin in Treatment of Neurosyphilis" *Journal of the American Medical Association,* CXXXI (1946), 1255-1260
74 Romano, J and Engel, G L "Physiologic and Psychologic Considerations of Delirium" *Medical Clinics of North America,* XXIX(1944), 629 638
75 Rosanoff, Aaron J *Manual of Psychiatry* New York. Wiley, 1938
76 Rothschild, D "The Role of the Premorbid Personality in Arteriosclerotic Psychoses" *American Journal of Psychiatry,* C(1944), 501-505
77 Rothschild, D "Senile Psychoses and Psychoses with Cerebral Arteriosclerosis" In *Mental Disorders in Later Life* (Oscar J Kaplan, ed) Palo Alto, Cal Stanford University Press, 1945
78 Ruesch, Jurgen and Bowman, Karl M "Prolonged Post-Traumatic Syndromes Following Head Injury" *American Journal of Psychiatry,* CII(1946), 145-163
79 Schilder, P. "Psychic Disturbances After Head Injuries" *American Journal of Psychiatry,* XCI (1934), 155-188
80 Silverman, Milton "We Can Lick Epilepsy" *Saturday Evening Post,* January 17, 1948, pp 22-23
81 Stokes, John H and Steiger, Howard P. "Penicillin Alone in Neurosyphilis" *Journal of the American Medical Association,* CXXXI(1946), 1255-1260
82. Strecker, E A and Ebaugh, F G *Practical Clinical Psychiatry* (5th ed) Philadelphia: Blakiston, 1940
83 Taylor, John H "Control of Grand Mal Epilepsy with Electric Shock" *Diseases of the Nervous System,* VII(1946), 284-285
84 Temkin, Owsei *The Falling Sickness.* Baltimore Johns Hopkins Press, 1945
85 Thorpe, Louis P and Katz, Barney, *The Psychology of Abnormal Behavior.* New York: Ronald Press, 1948
86 *Time,* January 24, 1949, p 42
87 *Time,* February 14, 1949, p 52
88 Vessie, P R "On Transmission of Huntington's Chorea for 300 Years· The Bures Family Group" *Journal of Nervous and Mental Disease,* LXXVI(1932), 563
89 Wagner, M "Mental Hazards in Old Age" *Family,* XXV(1944), 132-137
90 Wechsler, D. *The Measurement of Adult Intelligence* (3rd ed) Baltimore· Williams and Wilkins, 1944
91 Wechsler, I S *A Textbook of Clinical Neurology* Philadelphia Saunders, 1943
92 Weisz, Stephen "Brain Tumor" *Diseases of the Nervous System,* VIII(1947), 23-26
93 Wexberg, E *Nutritional Deficiencies as Factors in Mental Disorders* United States Public Health Reports (Supplement No 168, Washington, D C 1942)
94 Williams, Greer "Syphilis—The Great Tragedian" *Hygeia,* XXI(1943), 182
95 Williams, R D , Mason, H L , Wilder, R M , and Smith, B F "Observations on Induced Thiamin (Vitamin B_1) Deficiency in Man" *Archives of Internal Medicine,* LXVI(1940), 785-799
96 Wilson, S A K *Neurology,* Vol II Baltimore Williams and Wilkins, 1940
97 Woltman, H W "Neuropsychiatric Geriatrics" *Archives of Ophthalmology,* XXVIII (1942), 791-801
98 Yahraes, Herbert *Epilepsy—The Ghost Is Out of the Closet* Public Affairs Pamphlet No. 98, December 1944
99. Zangwill, O L "A Review of Psychological Work at the Brain Injuries Unit, Edinburgh, 1941-1945" *British Medical Journal,* II(1945), 248-250



CHAPTER NINE

CHARACTER AND BEHAVIOR DISORDERS

Immaturity Reactions • Pathological Personality Types

There are many cases where developmental defects or pathological trends in the personality structure lead to a lifelong pattern of overt maladjustive behavior ("acting out") rather than to the mental and emotional symptoms characteristic of the neuroses and the psychoses Ordinarily such individuals have little or no sense of anxiety or distress Occasionally organic brain disease, such as epidemic encephalitis, head injury, or epilepsy, plays a major role in this type of behavior, as we have seen in the preceding chapter, but in most cases there is no apparent organic pathology Current classification of these character and behavior disorders includes two major groups: (1) immaturity reactions, and (2) pathological personality types We shall examine both in some detail

IMMATURITY REACTIONS

Many individuals are unable to maintain their emotional equilibrium and independence under stress because they are emotionally immature In some cases they have failed to progress to normal adult developmental levels; in others they have regressed to more childish levels in the face of severe stress. Often such individuals appear quite young for their age and show other evidences of physical immaturity although this is not always so. They may also display certain neurotic reactions, but their immaturity is their most salient characteristic and they lack the typical neurotic's anxiety Several sub-types are commonly recognized

IMMATURITY WITH SYMPTOMATIC "HABIT" REACTION

This category is used where a specific single symptom is outstanding. For example, it is applicable to certain types of speech disorders which occur in the absence of organic pathology or other personality disorders. It would not be used for a speech impairment that was a symptom of conversion hysteria, or for one that resulted from any organic defect such as

a cleft palate "Habit" reactions found here include stuttering, nail-biting, enuresis, tics, narcolepsy, and sleep paralysis, among others.

STUTTERING (STAMMERING). Stuttering* is characterized by a spasmodic repetition or blocking of speech sounds. It may vary from mild difficulty with the initial syllables of certain words to violent contortions and an inability to produce an initial sound at all Typically there is a repetition of the initial syllable of some important word or phrase, as in "The b-b-b-boy took your letter" or "D-d-d-don't do that" Speech sounds which require the greatest articulatory effort, such as *b*, *d*, *s*, and *t*, are most often troublesome.

Most stutterers have many grimaces, head jerks, and bodily movements which accompany the repetition In severe cases there may be rapid breathing, facial contortions, and a shaking of the whole body The entire performance represents an "internal struggle" to speak (Keschner[67]) After this momentary disturbance, however, speech becomes smooth and fluent until the next stumbling block

The stutterer's difficulty varies considerably from one situation to another For example, most stutterers can speak normally or with fewer blocks when they are alone, when whispering or singing, and when they are with people considerably younger than themselves or with someone whom they consider to be their inferior (Hahn[53], Pattie[96]) On the other hand, their stuttering increases in both severity and frequency in situations in which they feel inferior, embarrassed, or self-conscious In one case, for example, a business executive rarely stuttered except in the presence of his supervisor

Every age has had its quota of these speech sufferers Some of the more illustrious names on the roster are Moses, Aristotle, Virgil, Demosthenes, Charles Lamb, Clara Barton, and Andrew Mellon Today it is estimated that there are over 10,000,000 people in the United States suffering from speech impairments About 1,300,000 of these are stutterers (Greene[48]) This places the incidence of stuttering at almost 1 per cent of the population. It is interesting to note that there are far more male than female stutterers Estimates vary as to the actual sex ratio, but it would appear to be about 4 or 5 to 1 In 90 per cent of all cases the onset of stuttering occurs before the age of 6 years, with the greatest number of these between 2 and 3 years (Despert[30], Greene[48])

Dynamics. Stuttering has proved to be a most baffling disorder. Among the many interpretations of stuttering are

1. *Theories of hereditary predisposition* Such theories usually assume two basic factors in the causation of stuttering—an underlying constitutional predisposition which is inherited, and some immediate psychic factor or other stress that precipitates the speech disorder Some investigators report that as high as 65 per cent of stutterers come from families in which a parent or other relative has the same disorder (Greene[48]) This would, of course, not necessarily prove the existence of a constitutional predisposition, although it would certainly favor such a possibility However, other investigators find no substantiation for a constitutional approach in their studies of stutterers (Gray[44], Meyer[92]).

2. *Neurological theories* Brain damage as the result of birth injury or disease is frequently emphasized in theories of stuttering (Maas[84], Kopp[72]) Here it is thought that the neurologic disorder has caused disturbances in the coordination of the motor functions of speech. In support of this viewpoint, Maas states that many children have suffered from a severe infectious disease just prior to the onset of stuttering This condition, of course, could also be interpreted as a lowering of general psychobiological resistance which might precipitate stuttering in predisposed individuals In any event, such neurological approaches tend to minimize the role of psychological factors in the etiology of stuttering

* Stuttering is only one of the more common types of speech impairment which may be either organic or functional in origin

Travis[127], however, has advanced a somewhat modified type of neurological theory in which both neurological and psychological factors are included The neurological basis of the theory hinges upon the concept that stuttering results from a failure to establish unilateral cerebral dominance—that is, the dominance of one cerebral hemisphere over the other in the coordination of speech functions The cortical control of speech is normally located in the left hemisphere for right-handed persons, and in the right hemisphere for left-handed persons Presumably, in stuttering, contradictory neural impulses are sent down to the speech organ from both cerebral hemispheres because dominance of one hemisphere over the other has not been established This absence of the customary dominance is thought to result primarily from two causes: (1) forcing individuals who are normally left-handed to use their right hand, and (2) emotional conflicts and other stresses which destroy the slight margin of dominance held by one hemisphere over the other, or prevent the development of this dominance at all

In connection with the first point, Daniels[25] failed to find any increase in stuttering among 77 college students who reported a shift in handedness He did, however, find a somewhat higher incidence of stutterers among 138 students classed as ambidextrous In connection with Travis' second point—his emphasis on emotional conflicts and other stresses in destroying cortical dominance—it was observed that many combat-exhaustion cases in World War II who had undergone prolonged or particularly acute battle experiences manifested stuttering As their condition improved, the stuttering ceased However, there is not as yet adequate experimental evidence to evaluate fully this theory of stuttering.

3. *Psychological theories.* A wide range of psychological theories have been proposed to explain the etiology of stuttering Psychoanalytic theories have typically viewed stuttering as a state of arrested emotional development in which the libido has become fixed at the oral stage of development Stuttering here presumably gratifies an infantile oral need, and thus the stutterer unconsciously desires to stutter Other theories have viewed stuttering as simply a bad habit (a view now generally discredited), or as a symptom of some severe emotional conflict (Hahn[53])

Apparently a variety of neurological and psychological factors may play an important etiologic role in stuttering, and any one of the above theories or a combination of them may be of value in understanding the dynamics in a given case However, it would appear that in the majority of cases the stuttering represents a "symptomatic" habit reaction based upon emotional immaturity it is not merely a speech disturbance but a symptom of deficiencies in emotional development. These deficiencies are of such a nature that in minor stress situations involving everyday verbal intercourse, the individual is unable to maintain his emotional equilibrium and this lack is reflected in speech difficulties rather than in other symptoms

Of course, most stutterers do also reveal some other evidences of emotional maladjustment including anxiety, tenseness, feelings of insecurity and inferiority, and marked self-consciousness and fear in social situations (Despert[28, 29, 30]) Thus a student with whom the author worked stated that he had a fear of meeting strangers and persons in authority, and that he was often angry at himself because he stuttered and not infrequently was angry at others in whose presence he stuttered He also complained of severe feelings of embarrassment, self-consciousness, and inferiority in social situations Of course, the question may be raised as to what extent these symptoms are related to the cause of the stuttering, and to what extent they have developed because of the stuttering As we shall see, it appears to be a circular reaction

Perhaps, in understanding the dynamics of stuttering, it is helpful to note some of the characteristics of our own behavior when we have been in situations involving stressful

social relations. All of us have probably experienced the blocking of thought in stage fright or in a situation where we have had to make unexpected introductions In these situations it is probably safe to say that we were self-conscious and tense Defective responses under these conditions are very common We may generalize here and say that any factor or combination of factors (self-consciousness, tenseness, fear, parental concern) which increase the complexity of the situation beyond the speaker's power to cope with it will make for defective responses (Simon[115]). These defective responses may be evidenced in the blocking of thought processes, in excessive perspiration and other physiological emotional changes, and in tremors and general motor incoordination, including the phenomena of stuttering. In fact, all of us have probably stuttered mildly at one time or another under such conditions

Similarly, we have noted that stuttering occurs commonly as a temporary symptom in transient personality reactions to acute or special stresses Here, of course, we find a more extreme physiological upheaval and a temporary but intense undermining of security However, the dynamics of the stuttering here would appear to be essentially the same as in ordinary stuttering.

Thus in childhood when the child is learning the difficult motor coordinations involved in speech, any circumstance which tends to undermine his security and adequacy, or which tends to the development of self-consciousness, tenseness, and fear in *speech situations* may lead to a disruption of this motor coordination Precipitating factors here may include accidents, bad frights, quarrels and tensions in the home, and overdependence on or being pushed too fast by a domineering and perfectionistic parent Occasionally the stuttering may come on suddenly after the birth of a younger brother or sister Here the child's feelings of security may be undermined by a fear that the new arrival will displace him in his parents' affection.

Probably all small children from two to three years of age do a little stuttering in the process of learning to talk, where ideas run too fast for new motor patterns to keep pace. And once the stuttering occurs, for whatever reason, parents and friends may continually correct the child and "tighten up" themselves when the child is speaking As a result, the child may come to view the speaking situation as more or less catastrophic, and a vicious circle is set up Fear of stuttering leads to increased self-consciousness in social situations and consequently to increased stuttering, the increased stuttering tends further to undermine the security and self-confidence of the child, and so on.

Treatment and prognosis. Thus it is vitally important that the treatment of stuttering begin early Early treatment may consist largely of eliminating the environmental factors which are placing an excessive nervous strain on the child Often stuttering can be arrested at this point by counseling the mother and helping her to put therapeutic suggestions into effect in the home.

It is sometimes thought by parents that stuttering is a bad habit which the child will outgrow This definitely is not true—only about 10 per cent of the children who stutter overcome it without assistance (Greene[48]).

Therapy in later life is usually much more difficult, for by then the vicious circle has extended from the home to schoolmates and friends Frequently, too, the patient has adjusted himself to his stuttering and comes to view it as an undesirable but essential aspect of his personality—in the same way that a person might view an exceptionally large nose The author knows a wealthy dentist who is a chronic stutterer but who says he has grown accustomed to his stuttering and that it doesn't bother him any more

This unemotional acceptance is rarely seen during childhood and adolescence, however, when the stutterer may be made the butt of jokes and has difficulty in obtaining the respect of others and in achieving group identi-

fication And too often, because of his incapacity, he is slighted in educational opportunities. He may not be given a chance to speak in class or to take public speaking and so on His stuttering may also be a severe handicap in his relations with the other sex Greene[48] cites a letter which he received from a boy in Connecticut revealing the emotional intensity which may center around this handicap. The boy writes·

> "I have stuttered since childhood, and it is spoiling my whole life Is there any hope that I can overcome this affliction? Isn't there anything that can be done for boys like me?" (p 120)

Many times children who find difficulty in social participation because of this difficulty resort to excessive fantasy preoccupation and other unhealthful reactions Thus Meyer[92] finds not only anxiety but considerable evidence of schizoid personality traits among a group of 116 stutterers.

Treatment of adult stutterers centers around the strengthening of the patient's personality along lines of self-confidence and security. Specific practice in articulation and phonation to break up the repetitive habit and to insure proper speech patterns may be necessary, too, but the principal aim of therapy is the strengthening of the ego structure of the patient. This is not always easy to achieve and frequently requires prolonged treatment With adult stutterers too, of course, it may be necessary to alleviate tension-producing factors in the environment before individual therapy can hope to be effective

Most stutterers can be either completely cured or greatly helped by proper therapy However, any severe psychic shock may cause a regression to patterns of stuttering. In a case which the author treated for over a year with successful results, the patient would have occasional quarrels with his wife, after which she would leave him and return temporarily to her mother. On each occasion the patient's stuttering returned It is interesting to note in this respect that many of the patients who manifest stuttering as part of a transient personality reaction to acute or special stress were stutterers in earlier life (Despert[28])

NAIL-BITING This is of common occurrence in the general population, exceeding 25 per cent among school children and 20 per cent among college students and among naval recruits and other selectees for the armed forces in World War II.* The incidence of nail-biting is significantly higher among certain groups, including children reared in institutions stutterers, neuropsychiatric rejectees, and combat-exhaustion cases† Nail-biting is more frequent during the adolescent period and decreases thereafter with increasing age Pennington found in a consecutive series of 6946 naval recruits that approximately 1 male in 4 between the ages of 16 and 18 revealed this habit, whereas at the age of 30 the ratio had dropped to 1 in 9, and at 37 to only 1 in 12 (Pennington[97]). Although about as many girls as boys bite their nails, the males outnumber the females at later ages, apparently because of the greater social disapproval of nail-biting among young women and the value of well-kept nails in attracting members of the opposite sex (Coleman[23]).

Dynamics. Views with respect to the etiology of nail-biting vary with the theoretical orientation of the particular investigator Various physiological and neurological bases for nail-biting have been advanced, but these seem inadequate as a general explanation (Bovet[17], Shahovitch[111], Thom[121]). Psychoanalytic approaches have viewed nail-biting as (1) a substitute for masturbation, (2) the turning inward of hostility in an intrapunitive manner, (3) a mechanism for reducing the tension arising from an unresolved Oedipal situation,‡ and (4) a fixation on the oral stage of development wherein the nail-biting serves to gratify infantile oral needs (English and Pearson[36], Menninger[89], Wechsler[128]) Other

* These figures are based on findings by Billig[15], Pennington[97, 98], Wechsler[128], and Coleman[24]

† These are findings from studies by Despert[28], Goldfarb[42], Grinker[50], Hill[58], and Rottersman[105]

‡ See Glossary

theories relate primarily to the role of nail-biting as a method of tension reduction under conditions of situational stress Most common among the reasons given by 54 persistent nail-biters for their habit were (1) the desire to keep busy and to use up what seemed to the subject to be excess energy, and (2) anxiety connected with stressful situations such as final examinations, athletic events, social events, and various personal problems. Almost all agreed that the greater the tension, the more frequent and persistent the nail-biting (Coleman[24])

In general, it appears that the dynamics underlying nail-biting may vary considerably from one patient to another. In some cases it appears to be a tension-reducing mechanism in situations of general stress, in others, it seems to be the turning inward of hostility aroused by a loved person such as the mother. The author has dealt with several cases in which the patients rarely bit their nails except when they felt extremely hostile toward their parents, usually as a result of parental over-domination Preliminary results from a study of hostility patterns among nail-biters indicate definitely that these persons tend to be intrapunitive in the handling of their hostilities, as compared with a control group of non-nail-biters *

Various attempts have been made to relate nail-biting to more severe patterns of personality maladjustment, but although it is found more commonly among maladjusted groups, it is not in itself indicative of personality maladjustment (Pennington[98], Coleman[24]) However, nail-biters do appear to be significantly more anxious than non-nail-biters, at least in their own evaluation of themselves (Coleman[23])

Treatment and prognosis. Nail-biting is not only a very widespread habit among large numbers of young people, but it causes a great deal of personal unhappiness and suffering. Many nail-biters try desperately to break their habit but without success Consequently, it is surprising that so little has actually been published by way of an experimental evaluation of therapeutic procedures Despite differing points of view with respect to etiology, most investigators agree that the symptomatic treatment of nail-biting by restraint, bitter applications, scolding, and threats is of little value Rather, the therapeutic emphasis at present is toward tolerance, understanding, and helping the nail-biter to achieve a more adequate overall personality adjustment and more appropriate methods for discharging his tensions * With the latter approach, most nail-biters can either be cured of their habit or markedly helped

ENURESIS. The term *enuresis* means the habitual involuntary discharge of urine after the age of three years It may occur during the day but most commonly occurs during the night (bed-wetting) The enuresis frequently occurs in conjunction with dreams in which the patient imagines he is urinating in a latrine only to awaken and find he has wet the bed Occasionally these dreams may be sexual in nature, with the resulting urination apparently closely related to sexual satisfaction The enuresis may vary in incidence from regular nightly occurrences to occasional instances when the individual is under considerable stress. Commonly it occurs from two to five times a week.

The number of enuretics among the adult population is not known, but it is probably higher than is generally suspected Levine[75] reports an incidence of 12 per 1000 among recruits at a naval training station. However, these men had already passed induction screening, and so the figure is probably much too low for the general population. Thorne[123] reports that 16.1 per cent of a group of 1000 consecutive selectees questioned at an Army induction center reported enuresis after age 5, and 2½ per cent did not gain control until age 18 or later. Enuresis seems to be much

* Unpublished Master's Thesis on "Hostility Patterns among Nail-Biters," by Charles Seret

* References here include Bevans[14], Knight[69], Louttit[82], Schachter and Cotte[109], Wechsler[128].

more common among males than among females, though the lack of adequate statistics on its incidence among females makes any conclusion here tentative. The incidence of enuresis declines markedly with age, and aside from cases involving organic pathology, the disorder seems to be relatively infrequent after the age of 30 (Thorne[123]).

Dynamics. Enuresis may result from a variety of organic and psychological factors, but psychological factors seem to predominate among enuretic children Where enuresis extends into adolescence the patient as a rule has little insight into his condition and usually attributes it to "weak kidneys."

Among children and early adolescents enuresis has been attributed to a variety of dynamic patterns, including (1) an indirect expression of anxiety, (2) an attempt to show a need for parental attention and help, (3) a desire to experience the pleasure of urinating, (4) an expression of hostility, often unconscious, against the parents, (5) the solution of sexual problems where nocturnal emissions would lead to too much anxiety, (6) neuroticism, and (7) biological and/or emotional immaturity (Benowitz[11]) Undoubtedly any one or several of these factors may play a dominant etiologic role in enuresis during this general age period.

In young adults enuresis is closely associated with other psychopathological reaction patterns In a study of 150 cases Levine[75] found psychiatric abnormalities in 83 per cent Similarly, Goldman and Bergman[48], in a study of 137 adult male enuretics, report that significant psychopathology was present in every case. Berdie and Wallen[12] report that enuretics as a group evidence below-normal schoolwork and intelligence as well as other psychopathological symptoms. Particularly outstanding in these studies was the high incidence of emotional immaturity, psychoneurosis, and mental deficiency In connection with mental deficiency, Thorne[123] found that enuresis was much less frequent among higher grades of mental defectives: 83 8 per cent of a group of 54 idiots, 12.8 per cent of a group of 164 imbeciles, and 4 0 per cent of a group of 125 morons were enuretic

In general, it would appear that enuresis in adult males results from inadequate habit training from an early age, usually associated with parental indifference or overindulgence, and this pattern continues in later life periods as an indication of anxiety, insecurity, and general emotional immaturity

The following cases cited by Benowitz[11] illustrate some of the diverse dynamic factors that may be involved in enuresis

Case I

"A 21-year-old white soldier gave a lifelong history of enuresis This has continued at a frequency of three to five times a week since he has been in the Army He was unable to go more than two days without wetting his bed. Many times he was able to awaken himself at 2 or 3 o'clock in the morning and at these times he would not wet his bed He was taken to civilian doctors many times by his mother and was under treatment once for an entire year without success The doctors attributed the enuresis to general nervousness

"He complained that he had always been nervous, that he bit his fingernails continuously and that he smoked three packages of cigarettes every day He said that 'watching the sight of a house burning down or anything exciting made his teeth chatter and made him jumpy and nervous' Talking to people makes him jumpy and causes him to blush He believes he was 'just born this way.'

"The soldier was the youngest of 2 children He came from a rather well-to-do family who own their own home and business in rural Illinois However, the soldier's childhood had been one in which he had been subject to a great deal of fear and turmoil in the home His father was very temperamental and insisted on strict obedience When the soldier was not obedient, he was whipped 'until the blood would run.' He was very mischievous as a child and did not obey his parents His father made him

stay at home at night and frightened him by telling him that the 'devil and the bogie man' would get him if he did not behave This made the soldier extremely fearful of being left alone at home in the dark At the age of 6, he was scared one night by a friend of his father's who dressed himself up as a ghost He stuttered for six months afterwards. The father was always very 'stingy and cruel to me' Many times during his childhood he felt like killing his father He now has very little to do with his father." (p 77)

Case II

"A 34-year-old white soldier gave a lifelong history of enuresis at a frequency of two to three times per week He had never gone longer than one week without wetting his bed His enuresis usually occurred as a result of dreaming To the age of 17 he recalled having dreams of urinating in a latrine or of a need to urinate in a public place while playing, and he would then wet his bed

"At the age of 17, he began to have sexual dreams, in which he found himself having intercourse with older women As he was about to reach a climax, he was unable to have an ejaculation The woman with whom he was having intercourse would then ask him to urinate on her or in her, and he would then comply with her request He would then awaken to discover that he had wet his bed Occasionally he has dreamed of satisfactory intercourse and has not wet himself He complied with the request of the woman in his dreams to urinate on her because it gave him the same kind of sexual gratification that he felt while having satisfactory intercourse The women in his dreams reminded him of the wives of men he had known and befriended Often the woman of whom he had dreamt reminded him of his mother because 'they have the same build and looks' His mother had also been enuretic" (pp 72-73)

Treatment. The treatment of enuresis may vary somewhat with the age of the patient. In treating children the focus of therapy may be on the parents rather than the child. For older patients the most effective approach seems to be psychotherapy directed toward helping the patient to achieve a better overall personality integration (Backus[6]) Of course, enuresis is often a highly persistent habit, but like other psychopathological symptoms it usually gives way in the face of intensive psychotherapy. It may be noted in passing that various mechanical devices—for example, electrical devices which shock the patient when he urinates in his clothing or in bed—have been used, but although these may be of value in certain cases, they essentially represent symptomatic treatment and hence do not correct the underlying cause of the deviant behavior.

TICS A tic is an intermittent muscle twitch or spasm which is usually restricted to a localized muscle group The term is used rather broadly to include blinking of the eyes, twitching of the mouth, licking the lips, shrugging the shoulders, twisting the neck, clearing the throat, blowing through the nostrils, facial grimaces, and many other motions. In some cases the patient may be aware of the tic, as in clearing the throat Usually, however, he performs the act so habitually that he is completely unaware of its occurrence In fact, in many instances he is not even aware that he has a tic.

Tics occur most frequently between the ages of 6 to 14, but are also fairly common among adults They occur frequently in connection with broader personality maladjustment, as in the neuroses and psychoses. However, we are concerned at the moment with those instances in which the tic constitutes the most striking symptom.

Dynamics. Although tics may have an organic basis, the great majority are psychological in origin. Here the tic fundamentally represents the expression of some inner tension and tends to the reduction of this tension (Fenichel[37]).

Many of us evidence nervous mannerisms or tics when we feel embarrassed or self-conscious in social situations. It is common

for a public speaker to clear his throat repeatedly, or to cough before he begins to speak. In the average individual this response is not carried over to ordinary social situations where he feels much more confident and secure In the case of the ticquer, on the other hand, these feelings are usually persistent—he is under almost continual stress because of feelings of self-consciousness and inadequacy, or as a result of tension-arousing conflicts Not infrequently, repressed sexual desires or hostility may lead to the accumulation of tension and to feelings of uneasiness, restlessness, and irritability, which may be reflected in and to some extent discharged by the tic Typically, the greater the tension, particularly in social situations, the more frequent the tic

Tics frequently lead to a further undermining of the individual's feelings of security and adequacy because they are so readily noticed and commented upon by others A young man of the author's acquaintance was thinking of giving up teaching because he had been told by many well-meaning friends that he had a most noticeable twitching of the mouth which occurred persistently throughout his lectures. As is frequently the case, he had been unaware of this muscle twitch, and even after it was brought to his attention, he could not tell when it took place However, he became acutely self-conscious during his lectures and continually worried about the occurrence of his tic. As a result, his general level of tension increased and so did the frequency of the tic—a vicious circle had been established.

Treatment. The treatment of tics involves psychotherapy directed toward more effective personality adjustment and more appropriate means of tension reduction (Whiles[130]). In some instances hypnosis has been used to change the tic from an easily noticed area to the foot or some other region where others cannot see it Although such manipulations may be of practical value in many cases, we are again treating or transferring symptoms rather than dealing with the basic cause which led to the symptom The latter requires appropriate psychotherapy

NARCOLEPSY AND SLEEP PARALYSIS. In narcolepsy the patient has attacks of sleepiness These occur with little or no warning and may last from a few minutes to several hours This condition is relatively rare Solomon[117] reports the detection of narcolepsy in 19 of 10,000 colored recruits—an incidence about 60 times greater than that found in the white recruits.

Sleep paralysis is a peculiar condition in which the patient is conscious but unable to move or cry out It occurs when the patient is just about to fall asleep or has just awakened, and may last from a few seconds to several minutes (Shodoff[112]) During this period the patient may be able to open his eyes and look around but is otherwise completely helpless and usually experiences intense anxiety The condition will eventually disappear spontaneously, or it can be dissipated by merely touching the patient.

Dynamics. It was formerly thought that narcolepsy resulted from organic disease or other damage to the nervous system. In the light of present evidence, however, it would appear that most cases of narcolepsy are of psychological origin and represent an immature reaction to some unpleasant life situation (Langworthy[74]) The sleep episodes typically occur in patients who feel caught in an unpleasant life pattern to which they are expected to conform. Since they cannot break away from this pattern and live a life of their own choosing, they tend to escape from it in the emotionally immature form of dropping off to sleep. It is surprising in a way that more people do not utilize sleep as an escape from their problems, but apparently this reaction does not adequately protect most individuals from their anxiety

The dynamics in sleep paralysis are not as yet clear Heide and Weinberg[56] emphasize the factor of indecisiveness resulting from confusion with respect to immediate goals in a predisposed, immature, neurotic personality

Below is a case which apparently illustrates this dynamic pattern

The patient had for years been keeping house for her father, who suddenly remarried This took the patient very much by surprise and she appeared confused and bewildered by the sudden change in her status The patient was emotionally quite immature, and she stated that the event seemed to "knock the props" right out from under her However, she continued to live in the same house on a temporary basis, but on several occasions awakened from sleep to find herself completely unable to move After straining for what seemed an interminable time, she was finally able to move her hand Then complete motor control rapidly returned

It appeared here that the fear of rejection, the confusion in her life plans, and the insecurity engendered by her father's sudden remarriage led to the appearance of this symptom The symptom seemed to reflect symbolically the patient's actual life predicament—she was "paralyzed" and didn't know which way to turn or what to do—and it represented also an appeal for her father's sympathy and support

In many other cases, sleep paralysis appears to be merely one part of an anxiety dream or nightmare. Shodoff[112] cites the case of a young soldier who dreamed he was dueling with sabers. Just as he was about to be stabbed, he awakened to find himself completely paralyzed On another occasion the same patient dreamed he was about to be shot and upon awakening was unable to move

Treatment. Treatment in both narcolepsy and sleep paralysis is essentially the same as that in other immaturity reactions and consists in psychotherapy aimed at personality growth and more effective adjustment.

OTHER IMMATURITY REACTIONS

In addition to immaturity with symptomatic habit formation, there are four other immaturity reactions included in the Army Classification These reactions are self-explanatory and for our purposes may be briefly outlined

1. **Emotional instability reaction.** Here the individual reacts with excitability and ineffectiveness when confronted with minor stress Because of his emotional instability he usually displays strong and poorly controlled hostility, guilt, and anxiety which result in fluctuating emotional attitudes in his relations with other people Typically his judgment under stress is not dependable

2. **Passive-dependency reaction.** Here the individual is characterized by helplessness, indecisiveness, and a tendency to cling to others Typically he shows a background of parental overprotection and a failure to develop adequate initiative and self-confidence in facing reality situations, so that in later years he still clings to others for emotional support and help Often such individuals marry persons much older than themselves who will take the place of the missing parent figure Predominately, they maintain a child-parent sort of relationship to others, in which they rely upon others for protection and direction When faced with problems requiring responsibility and initiative, such individuals may become anxious and panic-stricken, evidencing a somewhat typical psychoneurotic anxiety reaction

3. **Passive-aggression reaction.** Here the individual is essentially a passive-dependent type but expresses considerable hostility and aggressiveness in passive ways such as by pouting, stubbornness, procrastination, inefficiency, and passive obstructionism It is a markedly immature but often effective method of expressing hostility

4. **Aggressive reaction.** Here the individual resorts to more overt but emotionally childish measures to express his hostility and frustration Irritability, temper tantrums, and destructive behavior are common Often there is evidence of severe underlying dependency needs coupled with morbid or pathological resentment toward those in authority upon whom the individual is forced to lean, or to whom he must relate for his protection and feelings of security.

These immaturity reactions are not ordinarily incapacitating, although they may be aggravated by minor stressful situations. Their treatment is similar to that in other psychopathology of psychological origin, with emphasis upon personality growth in the direction of mature and adequate reactions to reality. Typically these individuals tend to become increasingly mature, even without psychotherapy, as they grow older, evidently through the process of dealing with the unavoidable problems of living

PATHOLOGICAL PERSONALITY TYPES

In addition to immaturity reactions, there are several types of lifelong abnormal patterns in which the maladjustment consists in "acting out," rather than primarily in mental and emotional symptoms Such persons are frequently described as *pathological personality types* In some cases they show antisocial or other deviant reactions such as criminal behavior or homosexuality, which may be quite distinct from neurotic or psychotic disorders In other instances these personality types may be likened to abortive stages of a neurosis or a psychosis. Although they may show some of the characteristics of either or both of these disorders, however, they do not typically progress to the stage of an actual neurosis or psychosis

ANTISOCIAL PERSONALITY

This category applies to individuals who are not classifiable as mentally defective, neurotic, or psychotic, but who manifest a marked lack of ethical or moral development and an inability to follow socially approved codes of behavior Many of these individuals (also often called *psychopathic*) come from apparently normal family backgrounds, others have had a lifelong abnormal environment

The incidence of antisocial personality is difficult to estimate, for included here are a mixed group of individuals varying from unprincipled businessmen, shyster lawyers, quack doctors, high-pressure evangelists, and crooked politicians to impostors, rapists, and prostitutes Few of these individuals find their way into mental hospitals only about 1 per cent of all first admissions are so classified A much larger number are to be found in penal institutions However, the majority, although they are constantly in conflict with authority, manage to get by outside of institutions

Symptoms. Antisocial personalities are typically average or above in intelligence, are usually persuasive conversationalists, spontaneous, genial, and extremely likable. Upon brief acquaintance they usually make an excellent impression. However, closer acquaintanceship reveals a deficiency in moral and ethical values Conscience is poorly developed and the individual seems completely unable to understand and respond to accepted human values Related to this trait is a further inability to forego present pleasures for future gains or worth-while, long-range goals. All these propensities, coupled with immaturity and impulsiveness, frequently lead to sexual irregularities, lying, excessive use of alcohol, drug addiction, and criminal behavior

The antisocial personality has the happy faculty of completely rationalizing and projecting any responsibility for his unacceptable behavior, and despite the pleading of his family, exhortations from the clergy, and punishment by the law, he seems quite unable to profit from his mistakes in a socially acceptable manner. He frequently shows superficial regret for misdeeds and may even promise in a very convincing manner to reform, but his inability to understand the actual implications of his behavior soon leads to a repetition of the undesirable behavior patterns It is of vital significance to note that such undesirable behavior is frequently impulsive and unplanned, and is executed with a complete disregard for consequences, even though the likely consequences, such as imprisonment,

are well known to the individual. It is almost as though he lives in a series of present moments without real consideration for past or future, and with a callous disregard for the happiness of others. Cleckley[22], for example, cites the case of an adolescent boy whose father bought him an expensive Buick in order to cure him of the habit of stealing cars. The boy drove downtown proudly in his new car, parked it, walked across the street, and stole a Ford of ancient vintage.

Perhaps it will be profitable to summarize the wide range of symptoms which antisocial personalities may display. Not all of these are characteristic of a given case, rather they constitute symptoms which are considered indicative of this personality type (Caldwell[19,20]; Darling[26], Menninger[88], Sprague[118]).

1. Inability to understand and accept ethical values, except on a verbal level, or to pursue socially accepted goals.
2. Marked discrepancy between level of intelligence and conscience development.
3. Egocentric impulsiveness, irresponsibility, lack of restraint, and poor judgment. Prone to thrill-seeking, deviant sexual patterns, and other unconventional behavior.
4. Inability to profit in a socially acceptable manner from mistakes and ordinary life experiences except by learning to exploit people and escape punishment.
5. Inability to forego immediate pleasures in the interests of future gains and long-range goals. Lives in the present without consideration of past or future. Unable to withstand tedium and prone to nomad-like activities and frequent changing of jobs. External realities used for immediate personal gratification.
6. Ability to put up a good front to impress and exploit others. Often a charming, likable personality with a disarming manner and ability to win the liking and friendship of others. Often good sense of humor and generally optimistic outlook. Prone to social climbing.
7. Defective interpersonal and general social relationships. Individual usually cynical, unsympathetic, ungrateful, and remorseless in his dealings with others. Usually shows a history of difficulties with educational and/or law-enforcement authorities. No close friends.
8. Rejection of constituted authority and discipline. Individual behaves as if social regulations did not apply to him and refuses, except on a verbal level, to take any responsibility for his actions. Often shows considerable repressed hostility toward constituted authority or society in general, which may manifest itself in impulsive hostile criminal acts. Many times drifts into criminal activities but is not typically a calculating professional criminal.
9. Quick ability to rationalize and project the blame for his socially disapproved behavior. Lack of insight into his own behavior. Lies readily even though he knows he may eventually be found out by friends and acquaintances.
10. Irritating, disappointing, and distressing to others. Is frequently a great burden upon family and friends and creates a great deal of unhappiness for others. Often promises to change but rarely does so permanently—incorrigible.

Many of these behavior patterns are also frequently found in varying degrees in neurotic and psychotic behavior. In the antisocial personality, however, they are more pronounced and occur apart from any definite neurosis or psychosis. Below is a letter written by a young inmate of a penal institution to a girl whom he had never seen, with utter disregard of his current circumstances, his past, and his probable future. It is a good example of the vivid imagination, wishful fantasy, impulsivity, and emotional immaturity and instability of the antisocial personality.

"DEAR JUNE,

"Of course you know my cousin, David! Well, I had a long talk with him about beautiful

women He said that you are the most beautiful thing on earth The way he described you he made me think that I've known you all my life You must be a second Jean Harlowe I've dreamed about you, from the very first day he told me I'd give a million dollars to have you in my arms. Sometimes I think I am in love with you although I've never seen you Maybe someday I will see you June, my darling, I love you I love you with all my heart and soul Please believe me?

"June, my love, although I've never seen you I would like you to be my wife I have lots of money and life would be a bowl of roses for you I know that you will never regret it Because I will make you the happiest woman on this earth

"I am six feet tall, weight is 190 lbs, light complexion, sharp and always in the chips I can take you anywhere you desire Money doesn't mean a thing to me You can have anything your little soft, warm heart desires I own a cafe on Seventh Avenue. Business is very successful Money flows in like a bristling brook I have an apartment and a 1941 Chrysler convertible sedan, black with white-wall tires Everything works by the push of a button Life will be a luxurious one for you

"In the winter, I vacation in Miami, Florida In the summer, I go to Canada. If I can have you as my companion and later, my sweetheart and finally my wife, we both could enjoy these luxuries together

Love,

(Signed) JAMES"

(Banay[8], p. 171)

One of the most interesting types of persons found in the category of antisocial personality is the impostor, whose achievements are often extremely dramatic and worthy of better causes (Lubin[83, 87]). This is well brought out in the following case, which aptly describes the types of behavior often found in the antisocial impostor.

"As a glib, dreamy-eyed kid in Los Angeles' teeming Central Avenue neighborhood, Charlie —— felt himself a cut above the other Negro youngsters. He had bold ideas of becoming a great writer or famous legal light. But school bored him When unappreciative teachers filled his report card with F's, Charlie brightly forged them all into A's

"It took Charlie a while to find himself He drifted restlessly from job to job Once he tried writing a column for a Negro weekly After he had described an imaginary interview with Hitler, the editor demoted him to chauffeur The outlook was gloomy when Charlie was caught signing a friend's name to a check

"Imagination and his handy penmanship, however, altered Charlie's destiny He faked a civil service rating and got a job as deputy in the county jail Deftly he removed his criminal record from the sheriff's files He awarded a Master of Arts degree to himself and carried around a photostatic copy With the credentials of a dead attorney he secured admission to the California bar To reinforce the illusion, he attended a few law classes at Loyola University in Los Angeles

"In the role of a rising young attorney, light-complexioned Charlie cut a social swath He wangled invitations to Hollywood benefits, and ran up a $2,000 bill for rented evening clothes When the photographers exploded their flash bulbs, Charlie would sidle alongside the celebrities

"Charlie became a familiar figure at political rallies, usually edged his way to the speakers' platform To widen his connections, he wrote himself membership cards in the Knights of Columbus, Ku Klux Klan, B'nai B'rith, the Communist Party and Gerald L. K. Smith's America First He slipped into the studio of radio station KFWB during a memorial broadcast for F D R, and was on the air before anyone could stop him.

"When the U.S went to war, Charlie told the draft board he had a wife and two children Then he sent the board a postcard announcing his death. Later he was seen on Central Avenue in a captain's uniform, smartly returning the salutes of passing enlisted men. At war's end



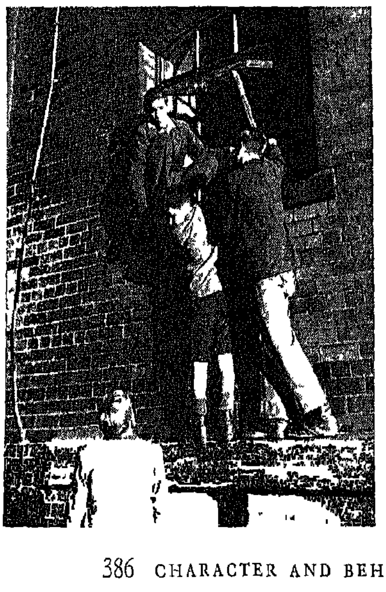


The "Normal" Criminal

When a boy grows up in a squalid home in a dismal slum area, where there is no father, the mother is an alcoholic, and the other members of the family include a feeble-minded sister and her illegitimate child, it would be surprising indeed if he developed into a civic-minded, law-abiding member of society. Yet such children, thrown on their own at an early age, often develop a resourcefulness, courage, self-reliance, and loyalty to their group which make for a strong, stable, essentially normal personality whose maladjustment lies in a bitterness born of idleness and frustration and in the fact that loyalty develops toward a small sub-group rather than toward society as a whole. It is these children who become our deliberate, professional criminals.

Such a boy is Fred, one of the juvenile delinquents whose cases are reported in the British film Children on Trial, *produced by the Crown Film Unit to show the ways in which England has attempted to cope with the growing problem of juvenile delinquency. Fred is sullen and intractable, a constant truant who harbors an understandable resentment against society in general and finds satisfactions where he can, as in a game of cards at the curb.*

Bored, broke, and thrown out of a poolroom because they are under age, Fred and three friends break into a warehouse, but Fred is caught and sent to the Liverpool Farm School. Bitter and scornful of standards there, he rebuffs all efforts at friendship and bides his time till he has a chance to steal some money and escape.





He returns home but is rejected by his mother, who sees only trouble in his return and tells him, "Go away! Go on leave me alone Go back where you came from" Seeing the home in all its sordidness, and hurt and shocked at her rejection, Fred wanders aimless and hungry through the streets and is quite overwhelmed when, arrested for stealing a pie, he is defended by the headmaster of the Farm School, who prevents a new prosecution

Sent back once more to the Farm School, Fred gradually begins to enjoy the good food, the security, and the rough, hard farm work to which he is assigned this time, instead of to the classroom as previously He is a natural leader, and for the first time in his life has the opportunity to experience constructive activity He revels in it, learns to swim, plays on school teams, and works so hard that he earns a double raise in pay and permission to go home to visit his family for a weekend

Home again, Fred finds his old friends still idle, and their joys now seem infantile and boring to him He is glad to get back to the school But the school realizes that one of its jobs is to train its boys to be able to withstand the adverse influences of the home environments to which they must eventually return, and after two years at the school, Fred is judged ready to stand on his own feet He leaves, confident of his ability to support his family and determined to make a go of it The Welfare Officer has found him a good job and will maintain contact to offer guidance and encouragement.

Stills from the Crown Film Unit film *Children on Trial*, courtesy International Film Bureau, Chicago



he donned a veteran's button, began campaigning on G I political programs, and set his hopes on a City Council seat

"Last week the bold career of 28-year-old Charlie —— suddenly collapsed Los Angeles police, tipped off by investigators from the state bar association, jailed Charlie on a half-dozen local and federal counts" (*Time*[124], p. 26)

Dynamics. Views regarding the dynamics in cases of antisocial personality vary widely. Some investigators view it as a distinct constitutional disease or deficiency; others are prone to attribute it to particular types of family and community organization Let us examine some of these factors in more detail

1. *Biological factors* A great deal of emphasis has been placed upon constitutional factors as the basis of antisocial personality, as evidenced by the various alternative names that have been coined for this condition, such as "constitutional psychopathic inferior" Lindner[76] feels that the impulsive, restraint-free behavior of the antisocial personality suggests the possibility of neurological malfunction such as is assumed in Hughlings Jackson's concept of "release of function" According to this theory, the higher brain centers (which are concerned with learned adaptive and ethical behavior, and which ordinarily act as inhibitors over the lower, more primitive neural centers) operate inefficiently in these individuals in their job of maintaining adaptive controls. This inefficient or ineffective function might be due to either hereditary or developmental structural defects in the higher centers or to brain pathology, such as results from encephalitis or head injuries In any event, adaptive controls and normal inhibitions are diminished or lacking and the behavior of the individual is swayed by whims and fancies and directed toward an immediate infantile satisfaction of needs and desires This neurological theory is, of course, closely related to the theories which we discussed in connection with the impulsive and deviant behavior found among post-encephalitic children

Evidence to support this point of view is found in the high incidence of abnormal brain-wave patterns in this group (Diethelm[32], Hodge[61], Knott[70]) Precise figures vary from one study to another, but most studies indicate that between 40 to 75 per cent have abnormal brain rhythms Silverman[114] found that 80 per cent of a group of 75 criminal psychopaths had abnormal or borderline-abnormal brain waves, and suggested this might indicate a close relationship between epilepsy and psychopathic personality

But final conclusions cannot yet be drawn here For one thing, we do not know whether this cerebral dysfunction was inherent, congenital, or acquired Silverman also found that only 15 of the 75 psychopaths had presumably normal family and environmental backgrounds, and so again we are faced with the difficult problem of separating hereditary from early environmental influences Also it has been found that many psychopaths do not evidence abnormal brain rhythms (although this in itself would not completely guarantee integrity of structure), and that feeble-minded persons who do manifest such faulty brain structure are not typically psychopathic in their personality traits. Therefore it would appear that although some cases of psychopathic personality may be based primarily upon faulty brain structure, in the majority of cases where faulty structure exists, it is an important interactive factor rather than a major cause of the psychopathology.

2. *Psychological factors.* Thomas[122] has pointed out that the traits typically found in antisocial personalities today are similar to those traits noted throughout history and literature as characteristic of the person of bad character. Thus it seems possible that the development of such traits can be explained in terms of the factors involved in personality development generally That is to say, the antisocial personality may be simply one more possible type of undesirable reaction to stress which the individual may learn during his growing up

Some antisocial personalities are to be regarded as the normal product of a lifelong abnormal environment. Here we find gangsters, racketeers, and other professional criminals They are typically the end products of vicious or criminal homes or neighborhood environments in which unethical behavior and criminal models have served as the guides for their childhood personality development. Dishay[33] states that about 10 per cent of the boys appearing in the Children's Court in New York City are the vicious, hardened, and aggressive habitual delinquents who espouse antisocial behavior as a career and the gang as a medium of protection, comfort, and training for effective operation Al Capone, Dillinger, and any number of other "public enemies" who have made criminal history in the United States, including the members of the much-publicized organization, *Murder, Inc.*, could be used to illustrate this type of antisocial personality.*

In far more cases the antisocial personality comes from so-called good homes Greenacre[47] points out that it is startling to note how many antisocial personalities come from families in which the fathers are respected and prominent men in the community, such as clergymen, judges, superintendents of schools, civic leaders, or, in the humbler walks of life, policemen, detectives, and truant officers Old adages to the effect that ministers' sons and daughters tend to be wild and to come to no good are probably based on general observations of the frequency with which "problem children" are found in the families of these conspicuously respected and often self-right-

* Because these individuals have developed normally with reference to the only society they have known, a separate category—"asocial personality"—is sometimes used to describe them However, although we here find deliberate and calculating criminality rather than the impulsive unethical behavior more typical of antisocial personalities, we do find the same lack of guilt or anxiety and the same blissful lack of interest and insight into the effects of one's behavior on other people Thus in our discussion we shall lump both types together under the category "antisocial personality" The relationship between crime and antisocial personality will be more fully explored in the next section.



The parents of this delinquent boy are respected members of their community who have taken pride in the advantages they have provided for their child, have always been strict disciplinarians, and are utterly unable to understand his "ingratitude" and antisocial tendencies. They feel it chiefly as a keen disgrace to themselves and have no sympathy for his "foolishness" and "perverseness." Their only approach to the problem is to try to punish or shame him into good behavior. Many parents, like these, fail to realize that providing well for a child's physical needs does not automatically insure satisfaction of his psychological needs. Often they do not even realize such needs exist. Their interest is in the child's behavior, not in what lies back of it. They would be surprised and resentful if it were suggested that the behavior disorders develop not in spite of their efforts at training but actually because of them.

Photo from the Crown Film Unit film *Children on Trial*, courtesy of International Film Bureau, Chicago

eous public figures where the home seems to all appearances to be such an unusually good one.

But although the home from which the antisocial personality comes may have a high rating in the community, it is not usually a desirable one psychologically. Often there is parental rejection which leads to a "cold" personality lacking emotional warmth and understanding toward others, and unable to give or receive affection in a normal way. Where this rejection also leads to intense hostility toward the parents and the world in general, the way is, of course, paved for antisocial behavior. In other instances personality development along lines of independence and maturity has been smothered in parental overconcern and overindulgence. It would appear that the typical antisocial personality often comes from a home in which these patterns are combined.

Heaver[55] emphasizes a type of early environmental conditioning provided by a mother who overwhelms her son with indulgence and solicitude, and a father who is highly successful, driving, critical, and distant. He also points out that emotionally immature patterns of behavior may be perpetuated in the child by the unconscious immaturity reflected in the parents' actions and attitudes. Following a somewhat similar dynamic approach, Greenacre[47] emphasizes the frequent marked discrepancies and conflicts in the parental attitudes in regard to authority, independence, and goals of achievement. Often there is a stern, respected, and often obsessional father, who is remote, preoccupied, and fear-inspiring in relation to his children, and an indulgent, pleasure-loving mother who frequently is pretty but frivolous and often tacitly contemptuous of her husband's importance in the business world. Children are quick to sense these attitudes and conflicts.

Usually such parents are socially prominent and extremely dependent upon the approval and admiration of the other members of their community. As a result it becomes of crucial importance to maintain the illusion of a happy family before the world, concealing any evidence of conflict, misery, bickering, and unhappiness and pretending that they do not exist. The children too become part of this

show-window display and a premium is put on formally good behavior and the pleasing of others Thus develops in miniature the attitude which later is so characteristic of the antisocial personality—what seems to be is more valuable than what is This attitude, together with emotional impoverishment or emotional smothering, leads to the development of inadequate concepts of reality in which the façade is of prime importance

This opportunistic need to be pleasing and to win social approval for their parents' sake seems to develop early in these children a charm and tact which give the semblance of genuine responsiveness and consideration for the interests and welfare of others but which can usually be unmasked in all its superficiality on closer acquaintanceship However, this early trend of development frequently leads to strong personal charm and great adroitness in handling people for purely selfish ends

The family's position of social prominence and their attitudes concerning its importance undoubtedly place a considerable strain on the child Goals are high and accomplishments are expected to measure up to the standard Approved behavior is demanded as a matter of course Frequently this produces an almost neurotic compulsion on the part of the child to become important and gain public acclaim in his own right However, by virtue of emphasis upon appearances, the methods used to achieve this public approval are often exhibitionistic or otherwise undesirable.

Also, the vague realization and acceptance on the part of the child of the too-high goals which have been set for him lead to feelings of guilt and inferiority against which he unconsciously defends himself by aggressive and retaliatory action against society It is almost as if the child said, "You have forced me into a position where I can't be accepted and thought of as others are but am burdened with goals and expectations of accomplishments which I can't achieve " To defend himself against the feelings of hurt, self-devaluation, and frustration which ensue and to revenge himself for the catastrophic situation society has imposed on him, the patient seems almost deliberately to display opposite or opposed behavior which is often destructive and hostile

As Greenacre[47] points out, it is not surprising that under these circumstances a highly ambivalent attitude toward the parents and toward all authority tends to develop The awe-inspiring, magic father is feared by the child but at the same time there is an extension of the magic overevaluation to the child himself with the consequent feelings of exemption from the consequences of his behavior And frequently the prominence of the father does in fact protect the child from the ordinary consequences of his behavior, which only fixes the attitude more firmly The child's identification with the father and the frequent approval and admiration he receives from the community merely by virtue of the fact that he *is* his father's child may lead to narcissistic ideas of self-importance which have no basis in his own actual accomplishments All of this leaves him with an overly high self-evaluation which cannot be maintained in the face of later adult reality but which may none the less leave fantasies of magic omnipotence in which he feels immune from the consequences of his behavior

Because the remoteness and sternness of the father make more adequate and healthy identification with him impossible, a boy often remains in prolonged emotional subjugation to the mother and never develops a highly differentiated male sexual outlook Consequently, homosexual behavior and other sexual deviations are easily adopted in later life when conditions promote such activities In addition, this lack of an adequate male model after which to pattern his behavior usually leads the child to identify with many undesirable attitudes and patterns of his pleasure-loving and superficial mother Here we frequently find the inability to forego immediate pleasures in the interests of future ones and a general tendency to the impulsive

gratification of immediate desires without regard for the past or the future

We are in a position now to see how it is that the antisocial personality frequently has very high ideals which are expansive and unrealistic and completely detached from reality. We can see why he is unable to pay more than superficial lip service to them and does not even attempt to pattern his actual behavior in conformity with them It is frequently said that the psychopath evidences no anxiety, that he has no guilt feelings, and that his conscience has never been adequately developed Greenacre points out that this is a matter of degree Many psychopathic personalities do apparently suffer from guilt feelings which in extreme cases may actually lead to illegal behavior merely as a device to insure punishment by society; by this means the individual alleviates his feelings of guilt about previous behavior patterns However, feelings of guilt are roughly commensurate with the self-critical faculties of the conscience, and the development of such faculties is not favored by the environmental background out of which the antisocial personality comes.

As increasing experimental and clinical evidence has become available, many investigators have emphasized that the disruptive antisocial behavior of the psychopath seems to be defensive and retaliatory rather than constitutionally disorganized or spontaneously disruptive. Antisocial personalities apparently act out their conflicts and impulses rather than accept the neurotic pattern of worrying them out. This point of view is emphasized by Lindner[78], who attributes the violent rejection of authority, the hostilities, and the destructive, blind lashing out of the antisocial individual to an attempt to restore the dynamic equilibrium of the personality. As Kraines[73] has pointed out, the psychopathic state frequently seems to center about an intense feeling of unrest and tension which builds up and seemingly leads to violent impulsive action, usually antisocial in nature, as a means of alleviating or reducing this tension Apparently much of this tension is generated by the failure of society to accept the antisocial personality at his own self-evaluation

Although the above pattern of background factors seems to occur rather frequently in antisocial personalities, other types of family and environmental backgrounds should not be overlooked Actually very little information has been achieved in this field, and the dynamics are still a highly controversial matter

In summary, then, we may say it would appear that the psychopathic personality represents a highly mixed group of individuals who seem to have in common the fact that they are impulsive, emotionally immature, irresponsible, unethical, and fail to make an adequate social adjustment. Their background frequently reveals possible constitutional or acquired brain abnormalities as well as environmental conditions which are not conducive to the development of adult patterns of emotional and ethical behavior.

Nazi Field Marshal Goering represented many traits typical of the antisocial personality.

"HERMANN GOERING was a constitutional psychopath and his make-up was characterized by the plus and minus qualities of this dual type of personality He was intelligent, forceful, persuasive, genial, colorful, ambitious, egotistical, uninhibited, unscrupulous, ruthless, bizarre, and exhibitionistic He was described by Sir Neville Henderson as a blackguard but not a damn blackguard He was known to the German people as 'Our Hermann' and as 'Iron Hermann' Hess called him 'The Bull' and his party enemies called him 'The Blood Swiller' When under treatment for morphinism at the asylum at Langbro, Sweden, he was considered 'an extremely dangerous asocial hysteric.'

"Goering had a better family background than most of his Nazi associates. His father had been Governor of German Southwest Africa and Resident Minister at Haiti Hermann attended several boarding schools but he was bored and

restless till he got to the Military Academy, where he settled down to his studies He entered the army as an infantryman but he took flying lessons surreptitiously and got himself transferred to the Air Force against the wishes of his superior officers. He was a courageous and impetuous flyer and after the death of Richthofen he took charge of The Flying Circus

"At the close of the First World War Goering went to Sweden where he worked as a mechanic and as a civil aviator. He married a wealthy woman and was able to return to Germany and enroll at the University of Munich. In Munich he met Hitler and joined the Nazi movement His adventurous spirit persisted and he was wounded in the Munich Putsch He fled to Austria and later to Italy After the amnesty he returned to Germany and when Hitler came to power he joined him with number-two rank in the Nazi Party He became President of the Reichstag, Premier of Prussia, Chief of the Prussian Police, Head of the State Secret Police, Chief Forester of the Reich, Air Minister and Commander-in-Chief of the Air Force He was made a General Field-marshall and later a Reichs-marshall.

"Goering's manner of living is described as 'Byzantine splendor' and as 'piratical splendor' He built a pretentious country home near Berlin and furnished it magnificently with tapestries and paintings and antiques He had a private zoo. He required his servants to address his wife as Hoche Frau, thus giving her the distinction of nobility He felt that the Germans liked his display of luxury—that it gave food for their imagination and gave the people something to think about Goering was given to exhibitionism and he had a passion for uniforms, gold braid, medals, and decorations. Because of his large collection of uniforms he was characterized as Public Clothes Horse No 1. Facetiously it was said that he wore an admiral's uniform to take a bath Among his uniforms was a mailed costume of the ancient Teutonic type On a hunting expedition he once wore a bearskin and a Wagnerian headgear and he carried a spear One writer says of Goering 'My first impression was of being alone in a vast gold and blue room, with a man of average height, resembling a fat Caesar, standing at the end of the room beside his desk, girding an imperial robe about him, at his feet a sleeping lioness Belasco couldn't have done a better job of the setting

Back of Goering sunlight streamed golden through a long window between velvet draperies that matched his dressing gown The nine-months-old lioness, Caesarin, crouched at his side in golden sunlight, in splendid contrast to the blue gown Directly opposite me when I entered the room was a giant swastika done in blue and gold tile mosaic' Goering's lion cubs, according to the writer, were a part of the theatrical setting and they were exchanged at the zoo when they grew too large for pets. They were always named Caesar or Caesarin Goering would strut and swagger in private and public In political rallies he made himself a flamboyant master of pomp and pageantry He was an exhibitionist in the psychopathic pattern

"Goering was coarse and gross He was a Gargantuan eater and drinker He was ribald in jest. He laughed uproariously when his pet lion urinated on a lady's dress He once horrified his men and women guests at his country estate by having a bull and a cow mate before them Personally he enjoyed the spectacle and declared that it was an old Teutonic custom.

"'Our Hermann' was popular with the masses and they smiled goodnaturedly at his antics and self-display He demanded that they make sacrifices in order to win victory and exhorted them to choose guns instead of butter He patted his fat belly and said that he had lost forty pounds in the service of his country The Germans appreciated his sense of humor.

"Despite this geniality Goering was unscrupulous. In furnishing and maintaining his home he bought whatever he wanted and challenged trades-people to send him a bill When he was married he expressed his wishes regarding wedding presents in a manner which suggested intimidation He received incomes from twenty or more public offices. . When he was captured by the Allies . he had an armored train

of twenty cars loaded with art treasures which he had collected in conquered countries.

"Goering was unscrupulous in his exercise of authority He was said to be courageous, hard, challenging, and authoritative in the Prussian manner. He was described as an affable, hearty butcher. In connection with the persecution of Jews he declared, 'I define who is a Jew and who is not' When he was made Chief of the Prussian Police he told his men to shoot first and inquire afterward 'If you make a mistake, don't talk about it.' 'The faults which my officials commit are my faults; the bullets they fire are my bullets' Goering regarded his bullets as an effective form of propaganda He introduced the concentration camp and declared that it was not his duty to exercise justice, but to annihilate and exterminate He reintroduced decapitation as an honest old German punishment. Goering is given credit for plotting the Reichstag Fire and for the planning and direction of the Blood Purge Goering admitted that he had no conscience, his conscience was Adolph Hitler

"Like many a psychopath Goering had a tender side He was fond of animals, including his lion cubs He declared that 'He who torments an animal hurts the feelings of the whole German people.' He introduced model game laws and one purpose of this legislation was to prevent suffering in wounded animals In a jesting mood he told Sir Neville Henderson that if he was killed in the air raids on London he would send a special plane to drop a wreath at his funeral

"Goering's obsession was patriotism and nationalism Like Hitler he refused to admit that Germany was defeated in the First World War He helped Germany re-arm and developed a strong air force from the seemingly innocent Air Sports League. He said of his soldiers, 'Germany is our profession' However, he loved life and power and wealth and luxury, and it is probable that he would have avoided the Second World War if he instead of Hitler had been Fuehrer.

"Goering was often considered the most normal and the most conservative of the Nazi leaders Like most psychopaths he would appear normal in his social relationships and he might seem genial and kindly with his humor and laughter His pattern of behavior, however, identifies him as a constitutional psychopath and he presents a fair example of this personality disorder" (Bluemel[16], pp. 78-82)

Treatment and prognosis. Because of prevailing confusion concerning the dynamics of antisocial personalities and the additional fact that they are not considered psychotic and therefore are not eligible for treatment in mental hospitals, very little has actually been accomplished in way of treatment If organic factors exist, they are very likely incapable of modification, and the long developmental background would obviously make the modification of such patterns difficult especially in view of the fact that these individuals usually have no desire to be helped or changed

As a result, the prognosis for the recovery of antisocial personalities is not favorable although Lindner[77] has reported good results through the use of hypnoanalysis In some instances psychosurgery seems to have some beneficial effects Also many of these persons apparently improve after the age of 40, possibly due to a decrease in the strength of instinctual biological drives, to the gaining of some insight into their behavior through accumulated experiences, and to the alleviation of social pressure exerted on them for achievement It would be of dynamic interest here to check the brain waves to see if they show changes corresponding to those that take place in behavior during this period

Any method of treatment must involve a comprehensive personality redintegration along lines of developing emotional maturity, ethical and moral restraints, and personal responsibility. Such attitudes can be developed only under favorable conditions, as in the controlled conditions of a hospital where the therapeutic benefits of a well-defined routine, psychotherapy, and so on can be properly utilized over a long period of time Even

here results may be disappointing or relapses may occur when the patient is later faced by conflicts or unpleasant situations where his own desires conflict with the established rules of society. Since antisocial personalities are rarely hospitalized, they usually receive no treatment other than social disapproval and punishment, which of course only increase their difficulties and render recovery even more unlikely

A hopeful report comes from Banay[9], as a result of successful work with criminal psychopaths. He states

> "The work of this project has clearly demonstrated that they can be treated and greatly improved if there is a systematic approach to their problems The constant observation of these individuals brought out personality elements not easily recognizable under restricted and cursory examinations in court clinics and institutions By means of physical, laboratory, psychological and psychiatric examinations, by use of recommended frequent therapeutic interviews and any other specialized treatment indicated, it was found possible to bring psychopaths to a stability that banished any need for finding expression in crime There are definite indications that under suitable management, prolonged care and constant supervision, psychopaths are not as resistive to treatment as was previously believed. Even in this limited framework the results obtained can confidently be said to foreshadow a thoroughly effective handling of certain types of social deviates" (p 9)

Unquestionably a great deal more could be accomplished in the treatment of antisocial personalities by long-range therapy programs In view of the unhappiness such individuals cause their immediate families and loved ones, and the general social damage they do, it would appear desirable and economical in the long run to treat these cases more seriously

Prevention in this area is primarily a matter of public and parental education and of the early detection and rehabilitation of children evidencing tendencies in this direction

General relation of antisocial personality to crime. In our society crime is classified into three major categories treason, felonies, and misdemeanors Treason, which is extremely rare, consists in giving aid and comfort to the enemy or in levying war against the United States. Felonies are serious crimes such as murder, forgery, robbery, burglary, and rape which are punishable by death or imprisonment and heavy fines Misdemeanors are defined as minor offenses such as drunkenness, disorderly conduct, and vagrancy.

The incidence of crime in the United States is high in comparison with that in many other countries The FBI[81] reports that there were 1,763,290 crimes recorded in 1949, an increase of 4 per cent over 1948 It was a postwar high for murder, manslaughter, larceny, robbery, and other serious crimes, a major crime was committed every 18 seconds In connection with these crimes approximately 1 per cent of the adult male population was arrested and fingerprinted In 1946 there were 18,698 prisoners in federal institutions In addition to the above there were approximately 110,000 in jails and workhouses and some 29,000 "pupils" were in schools for juvenile delinquents (Menninger[90]) Eighty per cent of both juvenile and adult offenders are males The total cost of crime in the United States is variously estimated to run between 10 and 18 billion dollars per year This does not include the incalculable suffering of all concerned.

Despite the fact that crime is an ancient problem of civilized countries, very little effort has been made until the last few years to study its causes and effects systematically and to work out preventive measures for the protection of society As a result the information in this field is extremely meager

Until very recently, crime was considered a hereditary disorder which tended to run in families The concept of hereditary and constitutional factors in crime was given a great push by the Italian physician Lombroso[80], who listed physical traits which he considered stigmata of degeneration and therefore conducive

to criminal behavior Among these were a high, pointed head, a retreating forehead, large ears, asymmetry of the head, and projecting eyebrows—all somewhat apelike in character Despite his emphasis upon such constitutional factors, however, Lombroso did make some allowances for the role of psychological and social factors in crime, but unfortunately the latter were generally overlooked by those who seized on his views as proof of the constitutional viewpoint.

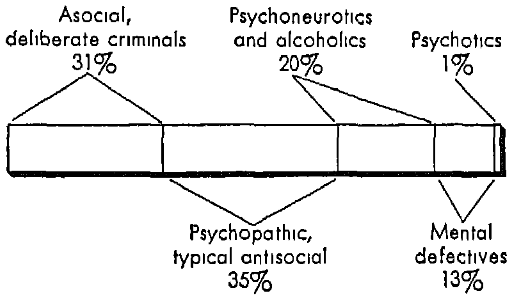
Although various recent attempts have been made to revive Lombroso's concepts of constitutional degeneracy in the light of more recent genetic and constitutional evidence, this viewpoint still lacks adequate experimental support and is no longer well accepted in scientific circles For example, studies have failed to show any significant differences between criminals and noncriminals in brain-wave patterns (Gibbs[40], Michaels[93]) Even when EEG's reflect a dysfunction in the brain, it is not always possible to attribute the criminal behavior to this disturbance, for many noncriminals reveal similar brain dysfunctions

Current emphasis has centered around the role of psychological and sociological factors in criminal behavior Psychologically speaking, we find such diverse modifications and personality types involved in criminal behavior that it would require an involved treatise to cover them adequately

Studying the war criminals on trial at Nuremberg, prison psychologist Dr G M Gilbert[41] differentiates several personality types in the Nazi hierarchy the highly suggestible and emotionally unstable type, of which Hess and Frank were typical, the psychopath, typified by Goering, the grasping and ambitious politician and Wehrmacht officer who finally realized where the Fuhrer's policies were leading but was too deeply embroiled to pull out, typified by Raeder, Schacht, and Von Papen, Wehrmacht officers who faithfully adhered to the Prussian code of honor (orders are orders—an officer first, last, and always) such as Jodl, Keitel, and Doenitz, Hitler youth indoctrinated early with the Nazi philosophy, typified by Speer, Fritzache, and Von Schirach, opportunists entirely lacking in moral principles, such as Von Ribbentrop, who broke treaties at the drop of a hat, and other mentally disturbed individuals such as Streicher "the Jew baiter," who appears to have bordered on paranoia.

A study[91] of approximately 10,000 men who entered Sing Sing Prison during a recent ten-year period indicated that the prison population could be divided into five major groups The types of personality represented and the relative incidence of each are shown below

PERSONALITY TYPES IN A PRISON POPULATION



Several studies have been concerned with the personalities associated with particular types of crimes Selling[110], in a study of hit-and-run drivers, found that 40 per cent of those apprehended could be classified as antisocial (psychopathic) personalities

Arieff and Bowie[4] used 18 diagnostic categories to describe the shoplifters referred by the Chicago Municipal Court for psychiatric investigation. Among these were drug addicts, neurotics, psychopathic personalities, schizophrenics, seniles, alcoholics, and so on In a study of the insanity plea in murder Rymer[108] found a wide range of psychological disorders including schizophrenia, psychopathic personality, psychosis with cerebral arteriosclerosis, and mental deficiency with psychosis Many relatively stable individuals have committed murders under unusual traumatic circumstances, such as discovering a wife's unfaithfulness.

To complicate matters further, there are the "mercy" killings whose motivations are often obscure, the murders which were incidental to other crimes such as theft, burglary, or robbery, and the more deviant crimes typically perpetrated by schizophrenics and other severely disordered mental patients. Schizophrenics occasionally participate in bizarre crimes in which the body of the victim is cut up and stuffed into a drain or some other opening

It seems clear that although certain personality types are more prone to one particular criminal pattern if they should become involved in crimes (paranoids are most prone to homicidal attacks upon their alleged enemies), there is a tremendous overlapping, and very diverse motivations and personality types may perpetrate similar criminal acts (Silverman[113], Radzinowicz[99]) The particular pattern of operation of each criminal, however, is usually somewhat unique. For example, one may always tell the same story in attempting to cash forged checks or he may attempt to pass them only in crowded stores at a particular hour of the day This consistent pattern is called his *modus operandi* and is obviously of great value in crime detection

Below is a case history showing the almost accidental way in which typical antisocial personalities are likely to become involved in criminal acts, and the utterly conscienceless attitude they may have toward their crimes. This individual had had a great deal of behavior difficulty in childhood and early adolescence, many arrests for petty offenses, and commitment to a correctional school He was considered by Rosanoff[104] to be a so-called psychopathic offender.

"R G., No. 63421, a white American, barely 21 years of age In the summer of 1938, in a cafe in Oakland, he met a girl of about his own age He did not see her again until the night of December 6, 1938, when he happened to meet her in the same cafe On this occasion he took her to supper, they did a great deal of drinking in the course of the night, then they went out for a drive, reached a lonely spot on the outskirts of the city, stopped the car and talked The girl expressed feelings of inferiority because she was too tall, often had pain from a chronic appendicitis, nobody cared for her She said she was going to take poison and that even her parents would not miss her He then took out a large hunting knife and told her she would not have the nerve to use it, but she grabbed it eagerly, and he had to twist it out of her hand He then pointed the knife at the base of her neck and asked if she would be afraid to have it go all the way in She said he would be doing her a favor So, 'without any more ado, I gave it a thrust' The heart was pierced and she died instantly

"He lingered for twenty or thirty minutes near the car, smoked nearly a package of cigarettes, the butts of which were later found strewn over the ground, observed from the hill the city lights in the distance, experiencing as he later reported a peculiar feeling of unreality—'what is it all about?' By that time the dawn was breaking, he approached the car with the girl still in the seat and the knife handle protruding He pulled out the knife and then pricked her neck again a couple of times, to see if she would bleed. 'She did not bleed, so I knew she was dead!' Then he opened her purse and curiously examined the contents—a little money, a gold locket on a chain, a few other trinkets, none of which he took He kept, however, a small snapshot of the girl, 'as a souvenir to remember her by, she wasn't a bad kid,' he later musingly remarked Then he pulled out her body, left it in the ditch at the roadside, drove home and went to sleep Later in the morning he appeared at the office in which he was employed, as though nothing had happened They had not been lovers, there had been no quarrel The murder had not been planned or premeditated and was without discernible motive He later stated that he had intended to kill himself too, with the same knife, but lost his nerve The sole plea before the court was not guilty by reason of insanity, and the defendant waived a jury trial." (pp 488-489)

Since murders are so sensationally played up in the newspapers, it is very difficult for the public to get an accurate picture of what has actually happened or to use such incidents for education rather than sensationalism For example, in writing up a particularly gruesome murder of a pretty brunette that occurred in Los Angeles an anonymous city-room employee on a local paper posted a catalogue of helpful clichés·

"The following usages are a must for anyone handling the —— case.... What are the police? Baffled, hardpressed, grimlaced, tight-lipped What is the victim? Beautiful, dark-haired pretty What sort of a crime is it? Fiendish How was the body mutilated? Horribly .. What are members of the victim's family? Grief-stricken. When they are not baffled, hard-pressed, grim-faced or tight-lipped, what are the police? Desperate What is the public at large? Shocked What does the killer face? The greatest manhunt in Los Angeles history " (*Time*[126])

A glance at the chart on page 395 will indicate clearly that for most men imprisoned for crimes committed, their criminal behavior is only a part of a larger pattern of personality maladjustment Thus the treatment and prevention of criminal behavior will have to involve the same procedures—hospitalization, medical and psychological therapy, social work, the early detection and correction of unhealthy personality trends, the correction of undesirable social conditions, and so on—which apply to abnormal behavior in general. Most investigators in this field feel that our modern criminal procedures have failed sadly in the correction and prevention of crime These investigators deplore the fact that the spirit and tradition of our law are punitive and revengeful—that society is more concerned with exacting "an eye for an eye and a tooth for a tooth" than it is with the rehabilitation of the criminal As Karpman[63] states, many still hold the naive belief that when a criminal is sent to jail he should thereby be completely cured of his criminal tendencies and antisocial behavior by the time he has served his sentence. Unfortunately, this can be achieved only by long-range psychotherapy in terms of the psychodynamics and needs of the particular patient, coupled with an intelligent handling of the individual by society upon his release Inasmuch as most prisoners eventually return to society, it is crucially important that we evaluate the effectiveness of our modern criminal procedures in terms of preparing the criminal for a useful role in society.

On the favorable side of the ledger is the fact that we are coming increasingly to view crime as a social and psychiatric problem with emphasis upon the rehabilitation of the criminal, and not any longer as a matter of "crime and punishment" in which the punishment is designed to "fit the crime" As Menninger[88] says, "... many of us feel that there should be little distinction between the psychiatric hospital and the reformatory Both should be institutions for the examination, treatment—and in some instances permanent detention—of individuals with behavior ineptitudes, distorted personalities, social maladjustment and sick minds." (p 157) This attitude, of course, applies not only to treatment of criminals but to character and behavior disorders in general.

In some forward-looking communities, this approach has been successfully put into practice Below are two cases successfully treated by therapeutic rather than punitive means. The dynamic factors underlying their criminal activity were very different but the two cases were alike in representing types who would never have been rehabilitated by simple incarceration and whose prognosis is usually very poor even with a therapeutic approach Thus they illustrate the role that the enlightened use of psychiatric techniques can play in rehabilitating individuals and in preventing further damage and expense to society.

Case I—*A schizoid personality*

"J S , twenty years old, was convicted of armed robbery. As it became evident, his criminal act

was a manifestation of a disintegrating personality. In the course of his incarceration his condition progressed and became so manifest that the director of the prison school had to refer him for psychiatric treatment shortly after his admission to Sing Sing

"When he was first seen the picture he presented was that of a rather immature youth, appearing younger than his chronological age, very pale and rather restless He discharged this restlessness in motions of his hands, in shifting his posture, drumming on the chair, biting his lips and pressing them closely together. There was very slight evidence of growth of beard and mustache, he had light blue eyes and light hair. He talked in a rather low, monotonous tone with considerable resistance until the discussion reached a sensitive topic connected with his criminal life and thought processes, when he exploded in both physical and verbal manifestations, his face flushing with anger which quickly changed to tears. He stood up abruptly to leave the room, making rather curt and sullen remarks about the nature of the questions addressed to him. Just as quickly as it had arisen however, the excitement burned out and he returned to his original rather placid, withdrawn and detached behavior

"He was hospitalized and he underwent a careful psychological exploration which resulted in the complete opening up of a rich fantasy world in which he identified himself with military leaders It was learned that this tendency dated to a time long before his criminal offenses Although his speech was fragmentary under ordinary circumstances in the ward, he would daydream a great deal or would stand at a window staring out for hours at a time On occasions he was observed talking to himself in an inaudible tone until he became aware that he was watched, or felt the presence of another patient nearby Then with a little shiver he would pull himself back to reality

"All this time he was living in a transitory state between a vague contact with the world and a complete, detached fantasy life With the aid of analytical orientation he began to take more interest in the outside world and to gain some insight into his difficulty Then he began to draw pictures of guns, revolvers and other weapons, and of fighting planes and battleships. They proved to be rather stereotyped, varying little during the extended months of his treatment, but through them he experienced release of his pent-up emotions and expressed his thought processes in a symbolic way A little later on he began to speak of his love for firearms, what they meant to him and how much the potential power compensated for his lack of success

"Coming from an industrious, lower middle-class family with one older brother who was rather successful, and one sister who earned higher than average salary for secretarial work, he also was expected to make a good showing, but owing to his gradually disintegrating personality and the state that Janet described as psychasthenia—a weakness in coordinating one's ability to combat the onrushing demands of the outside world—he found himself incapable of succeeding

"As a last resort he turned to guns as symbolic of power, and with the aid of two younger boy companions held up a series of liquor stores, obtaining not more than $8 to $10 each time, which he spent in buying more automatics This haphazard and improvised adjustment carried him through for a few months, but when incarceration took it away from him his whole life adjustment collapsed and he developed the schizoid behavior pattern just described Fortunately, he was taken in hand and more time was spent with him than it is possible to give to all cases

"In about six months he showed steady improvement and with the help of the director of the school a carefully devised program was put through for his reintegration Today he is completely adjusted, well trained in mechanical drawing and aviation mechanics He spends his afternoons in the library, reading and studying mechanical engineering In both conduct and behavior he has become open, sociable, and strongly oriented along the practical aspects of his existence.

"Within the year before he was admitted to Sing Sing he was twice placed on probation, and each time he failed. In the present retrospective evaluation it can be definitely stated that his borderline mental condition was responsible for his failure Neither court clinic nor prison ward could achieve more than classification when he needed treatment most In his present condition and with intelligent followup, he stands rather certain of never repeating his offenses, since compensation has been effected on a higher level His case illustrates the situation when criminality is the first manifestation of a disintegrating personality" (Banay[10], pp 15-18)

Case II—*A psychomotor epileptic*

"The second case is that of M W., nineteen years old, an army private in the bombing squad who, in uniform and just a few miles from his camp, held up a barroom Immediately afterward, at the point of his service pistol, he ordered a woman seated in a parked automobile to drive him back to his camp. When she refused to comply, he simply walked away This occurred about six months prior to the United States entering the war, in a vicinity where rather few soldiers were then seen, and he presented, with his six-foot two-inch leptosomatic habitus, a rather unique appearance. The crime as well as the circumstances was somewhat unusual He had $50 in his pocket at the time, and he took only $15 out of the barroom cash register

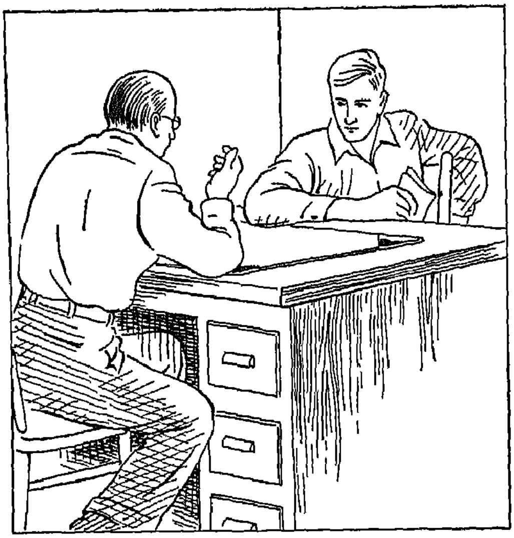
"He was brought to trial shortly, after a local physician had found him mentally well, and was sentenced for ten to twenty and five to ten years, running concurrently His only previous criminal history was a violation of the Dwyer Act in 1938, for which he received a discharge There was no history of unusual childhood disease. His education consisted of elementary, high school, and one year of college. He left college in 1938 because he felt increasingly weak, was unable to concentrate and had a general haziness of mental function He stayed around the house, helping with the garden, until a few months later he found himself in strange surroundings A policeman to whom he spoke on the street told him he was in Cheyenne, Wyoming He found $2 in his pocket and started to hitchhike back On the way he picked up an automobile to drive to Brooklyn, and soon afterward he was picked up in Ohio and charged with the violation of the Dwyer Act Because of his confused appearance, he was discharged to the care of his parents

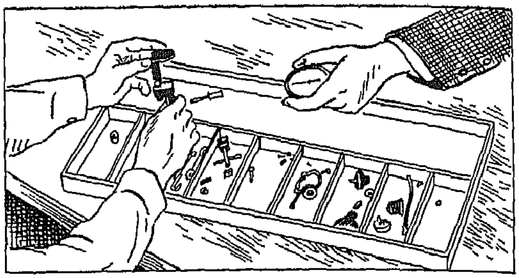
"In 1939 he joined the Army and served about six months until the holdup resulted in his arrest He himself had no explanation for the crime other than a somewhat hazy recollection of a state of excitement He appeared somewhat withdrawn and showed no spontaneity in speech, but was in contact with his environment and evidenced no abnormal content

"In view of the somewhat suspicious history of his fugue, he was admitted to the hospital and remained there several months While there he was observed to be a rather poor mixer, his daily conduct could not be studied satisfactorily When he was examined however, the rigidity of his personality, his poverty of thought and rather slow thinking aroused the suspicion of psychomotor epilepsy—a disease not manifested in major convulsions but in periods of mild confusion

"This suspicion was substantiated a few weeks after he left the hospital, when he was assigned to the workshop stitching shirts While he was so employed it occurred repeatedly that, instead of stopping the machine when one shirt was completed, he stitched as many as six or eight shirts together The foreman became suspicious and called for the psychiatrist, who examined him in this state He manifested definite cloudiness of intellect, an automatic behavior pattern, dilated and sluggishly reacting pupils He went into a deep sleep, which lasted several hours, and upon awakening he did not recall what had happened The diagnosis of psychomotor epilepsy thus being confirmed, it was a fairly reasonable conjecture that at the time of his unusual and senseless crime he was in this state of confusion

"Dilantin and luminal medication was given to him, and it eliminated the recurrence of these





Criminology Applied

By the Guidance Center of the Department of Correction, State of California[51]

The modern trend in prison administration is to treat criminal offenders as subjects for rehabilitation rather than revenge These sketches, adapted from drawings made by a talented inmate of the California state prison system, show one aspect of the enlightened program for criminal treatment instituted by the state legislature there

Established in 1944, the Guidance Center, which serves as a reception center, receives all new commitments to state prisons (except condemned men and a small percentage of younger men sent directly to prison after passing through another diagnostic clinic) Its reports are used to determine the degree to which the prisoner can be rehabilitated, and the type of institution to which he should be sent—whether one where custody is strict or one where the men are allowed some freedom and responsibility He remains at the Center about six or eight weeks and its reports are sent both to the prison to which he is transferred and to the state parole office Later, if the man comes up for parole, these reports help to determine whether he should be paroled, and are used in guiding him in his subsequent life outside the prison

The work of the Center begins even before a new prisoner is admitted, when it secures preliminary information from the county jail in which the man is awaiting state imprisonment At this time, most prisoners are in a state of fear and anxiety Upon entering the Center, they are interviewed by a trained counselor, and told that life in prison and beyond will depend upon their own attitude and desire for self-improvement The philosophy of the Center is that men in prison need not deteriorate psychologically to the point where they will cause society further damage and expense when they are released The work of the Center is conducted accordingly

During a man's first days at the Center, he is given routine medical, psychiatric, and psychological tests, including vocational and educational tests and interviews A sociologist interviews him to ascertain the social background of his crime, and obtains additional information, by correspondence, from his family, friends, employers, and the like Each man is sent to work for half of each day on a wide range of prison work projects, which may include sanding tables, pick-and-shovel work, or clothing manufacture For the other half day, he attends classes, which vary according to his previous educational background This educational program is planned to help the man adjust in prison, and to help him understand and improve himself The man may study for a high-school diploma, or take college correspondence courses, or study for an occupation. He hears lectures on prison life and the conditions for parole, sometimes given by successful parolees The classroom is the setting for many discussions of personal, social, and economic problems The men discuss with the teachers the nature of human needs and human emotions, and often benefit by the release of their feelings of tension, hate, and resentment at being "misunderstood"

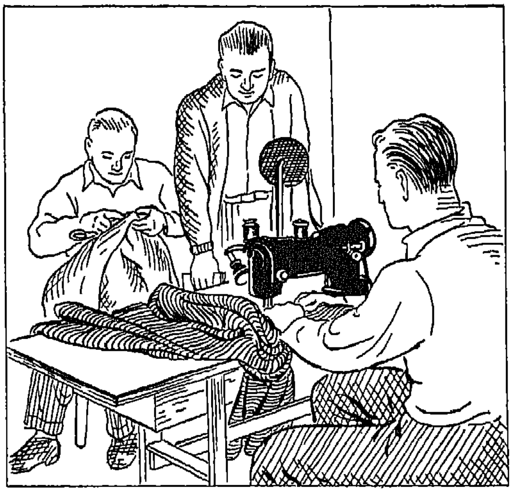
Each man's behavior at work, at school, and in other aspects of prison life is observed by the staff and further diagnosis of manual dexterity, learning ability, and special aptitudes is made on the basis of his performance in his varied activities Six months to a year following his admission, he is interviewed by the staff of the Center and his progress is studied in relation to the plans previously drawn up by the staff His term may be fixed at this time or not until later.



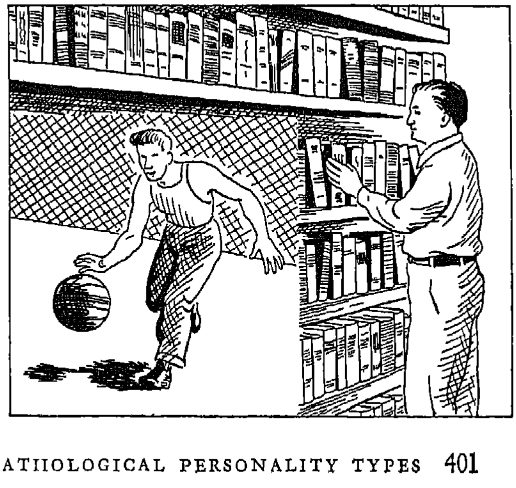


Meanwhile relatives and friends are helped to understand the tremendous role that a rejecting, unsympathetic family may have in the development and maintenance of delinquent patterns, and the great force for stability that an understanding, encouraging family can be. A prisoner who returns to society able to find a normal life in work and family is less likely to return to crime.

Procedures like these at the California Center are most valuable in preparing men and women for a constructive life in prison, and later for life as free citizens. Their success points up a pressing need for even more extensive research into the causes and most effective treatment of criminal behavior. Many lawyers and psychiatrists urge that the states establish Institutes of Criminal Science, to be staffed by medical personnel, psychiatrists, psychologists, social workers, and educators. Through the teamwork of such trained personnel, the social-personal illness of crime could be carefully studied and its frequency reduced, with a saving to society in both dollars and human welfare.







episodes His intellectual life became brighter and quicker and his psychometric examinations rated him with an M A of 20 6 and an I Q of 136—above average—in contrast with his previous psychometric reading, which gave him an M A of 16 6 and an I Q of 110 While this treatment was successful in arresting the pathological process, it accomplished very little for his legal status The very same discovery could have been made and applied in a period of probation and justice might have been better served " (Banay[10], pp 18-20)

SEXUAL DEVIATES

The development of adult sexual behavior from the undifferentiated potentialities of the infant is a long and complex process, and the end results are by no means uniform Each social group has its approved and disapproved sexual patterns and its sexual "deviates." In many countries where American motion pictures are shown, the kissing scenes are looked upon as perversions Among some peoples, polygamy, prostitution, and extramarital sexual relations are considered quite normal, whereas they are not approved by us

Because of our social taboos and regulations in the field of sex, very little is known about our sexual patterns or the nature and extent of the sexual deviations which do occur The publications of Kinsey *et al* [68], although questioned in some quarters, have added considerably to our meager fund of information, and together with other available evidence indicate that certain deviations in sexual behavior are much more frequent than has been generally supposed These findings also indicate, interestingly enough, that even within our own culture, sexually approved behavior varies considerably from one socioeconomic level to another For example, according to Kinsey, deep kissing, which is socially approved by upper-level groups, is often considered a perversion by those in lower educational and economic brackets.

In our detailed discussion of each of the various deviations we shall indicate the special factors which seem to play a part in development of particular trends, but perhaps before we start it will be helpful to point out some of the general factors that may be involved in sexual deviations

1. Deviations may be associated with severe psychopathology. We have noted the lowering of reality and ethical controls commonly found in psychotics Deviant sexual behavior thus may be part of a picture of severe psychopathology. In paresis and manic reactions, for example, sexual restraints may be so lowered that the individual exposes himself to others, masturbates openly, and becomes highly promiscuous in his sexual behavior Many of those arrested for sexual offenses are found to be suffering from more general personality disturbances

2. Deviations are perhaps most often due to faulty differentiation and development in the long process of growing up and learning to find one's place in society As we have noted, adult heterosexual behavior is the end result of a long process of development and differentiation, and the ultimate sexual patterns may vary greatly, depending upon the training and experiences of the child Homosexuality, for example, may be primarily the result of early seduction and training in homosexual patterns, frigidity may be the end result of a long process of repression and misinformation concerning the evils of sex. There is nothing inherent in the undifferentiated sexual potentialities of the infant which guarantees beforehand whether he will develop a "normal" heterosexual pattern or a deviant one Theoretically, under various educational conditions, almost any pattern could be produced—from complete abstinence to homosexuality or rape. There is an almost infinite variety both in the situations which are potentially stimulating sexually, and in the patterns of discharge that an individual may develop *

* For fuller expositions of this point of view, the reader is referred to the following Abrahamsen[1, 2], Deutschberger[31], Karpman[62], Lindner[77], Selling[110], Wertham[129], Zilboorg[132]

With our increasing realization of the importance of psychological factors in the development of our sexual patterns, attention has centered on the ways in which a child develops his conceptions of "masculinity" and "femininity" and learns to identify with the role society expects him to play The long process of differentiation of sexual potentialities starts in earliest infancy with our common tendency to dress little girls in frilly clothes, give them dolls to play with, and expect them to be sweet, gentle creatures, while we encourage a boy to be "tough," active physically, interested in sports and mechanical gadgets, and a better fighter than the boy next door

Sometimes, instead of accepting and identifying with the expected role, the individual rejects it—perhaps owing to faulty conditioning by his parents, perhaps because he is unsure of himself and feels inadequate for the part Thus an adolescent, with his new physical maturity and needs, may find the development of normal heterosexual patterns so difficult and frightening that he tries to escape in assumed indifference, tomboyishness (in girls), or in some cases, homosexuality Where the culture provides clear-cut rules and standards for male and female behavior, adjustment is much easier than in our culture, where, with our rapidly changing social attitudes, the roles of men and women are no longer clearly designated or agreed upon Girls are brought up to believe that they are the "equals" of boys, yet many former attitudes persist among men and women alike concerning what is proper work and fitting behavior for women—attitudes which are quite at variance with the stated principles of equality This leads to conflict and resentment and inability on the part of many women to accept a "feminine" role



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Among preadolescent and adolescent boys in particular, there are many conditions of both a sexual and a nonsexual nature which are erotically stimulating Not only is there direct erotic arousal by slight physical stimulation of the genitalia, friction with clothing, bodily tensions, and so on, but for physiological and psychological reasons that are not entirely clear, any very strong emotional reactions of even pain or fear are often associated with sexual stimulation and even gratification Included here are such things as accidents, fast car-driving, watching exciting games or big fires, and being scared (Ramsey[100]) Sources of stimulation that are more specifically sexual include dancing, sex jokes, seeing burlesque shows, sex pictures, females in movies, and underclothing or other articles closely associated with females, and seeing animals in coitus

Thus the young male shows a somewhat indiscriminate sexual reaction to a whole array of physical and emotional situations With time, however, sexual stimulation ordinarily becomes delimited to a narrow range of specifically sexual conditions

Kinsey[68] lists six chief sources of sexual discharge among American males masturbation, nocturnal emissions, heterosexual petting, heterosexual intercourse, homosexual relations, and contact with animals. As we shall shortly see, there are also certain other sources

of orgasm which are more rare and confined primarily to the more deviant patterns.

Some males derive 100 per cent of their sexual outlet from a single kind of sexual activity, whereas others may utilize several or even all of these more common outlets. According to Kinsey's findings, the average number of outlets used was between two and three, although this, of course, varied with different age groups and social levels Also the particular sexual outlets utilized and the frequency of their usage were found to depend upon age, the current possibilities for gratification, and individual variations in the strength of the sexual drive

This concept of a "total sexual outlet," often comprising several modes of expression for full gratification, has several important implications for the understanding of sexual psychopathology which we shall elaborate in our future discussion In passing, however, we may note that this concept helps to explain the puzzling fact that many exhibitionists and other sexual deviates are married and thus have "normal" sexual outlets in addition to their socially disapproved patterns.

3. The role of frustration Here, as elsewhere, the energetics of both development and functioning depend not only on drives from within, but also on the rewards, frustrations, and problems presented by one's socio-cultural environment, and on the standards, restraints, and evaluations made by the self

Sexual behavior not only is based upon a strong physiological drive but is reinforced by the pleasure ordinarily accompanying sexual gratification. Consequently, sexual frustrations are often extremely difficult to face and may promote various deviate sexual practices designed to reduce sexual tensions and to yield some measure of gratification. In prisons and other institutions where the sexes are segregated, for example, the incidence of homosexual behavior is usually much higher than in normal life situations In other cases, frustration is provided by an individual's own feelings of sin and guilt associated with sexual matters Thus the obstacles to development of desirable heterosexual patterns may be either internal or external, and in either case deviate patterns may develop instead.

The preceding factors are by no means the only ones to be considered in the dynamics of sexually deviant behavior However, they do provide a general background for evaluating and understanding the etiology of various sexually deviant patterns.

Sexual deviations may be separated into three general groups. (1) deviations involving excessive or deficient sexual activity or desire, such as impotence, (2) sexual behavior which involves a basically normal biological pattern but which takes place under antisocial conditions, such as promiscuity, and (3) sexual patterns which are considered abnormal in regard to the choice of sexual object, such as homosexuality and sadism.

Some of the so-called deviations, such as masturbation, are so common that "deviation" is hardly a proper term for them, and they are included in our discussion only because of the social attitudes centering around them We shall consider several such patterns as well as more extreme deviations, such as sadism The specific patterns to be discussed may be listed as follows

1 Impotence and frigidity
2 Satyriasis and nymphomania
3 Promiscuity
4. Rape
5 Incest
6. Masturbation
7. Homosexuality and transvestitism
8 Pedophilia
9 Bestiality
10 Exhibitionism
11. Voyeurism (scotophilia, inspectionalism)
12. Fetishism
13 Necrophilia
14 Sadism
15 Masochism

1. Impotence and frigidity. Impotence refers to an impairment in desire for sexual gratification in the male, or an inability to achieve it Although fatigue, worry, and various illnesses may temporarily impair sexual potency, prolonged or permanent impotence before the age of 55 is rather rare and

is almost always the result of psychological conflicts Kinsey[68] reports that only 27 per cent of the male population becomes impotent by the age of 70, and he concludes that many of these cases are of psychological origin There are, of course, occasional instances of injuries to the genitalia or diseases of the nervous system which may permanently affect erection or other genital functions Even here, however, the importance of psychological factors is sometimes startling Rowe and Lawrence[106] cite a case, for example, in which a patient's testes had been bilaterally removed for medical reasons The man temporarily lost his initiative and interest in work and became apathetic However, he fell in love with a woman who understood his condition and reciprocated his love He then found himself to be potent and his ambition and work efficiency returned

The major psychological factors in impotence may be summarized as follows

a) Fear These fears may relate to self-injury and possible loss of potency as a result of masturbatory activities, or they may relate to strong feelings of shyness and inferiority in approaching the opposite sex, so that feelings of self-consciousness and inadequacy impair normal sexual potency, or they may relate to possible detection and punishment Similarly, worry over business or other matters which arouse strong conflicting emotions may result in temporary impotency

b) Lack of emotional closeness to the sexual partner Here the individual may be in love with someone else so that strong feelings of unfaithfulness and guilt color his sexual behavior, or he may find his sexual partner physically repulsive, or there may be strong hostile or antagonistic feelings as a result of prior quarrels or conflicts Occasionally, over-attachment to the mother may lead to relatively unconscious feelings of unfaithfulness and to impaired potency.

c) Latent or overt homosexuality Here erotic desires may be focused around members of the same sex with a corresponding loss of feelings or actual repulsion for members of the opposite sex.

Since sexual adequacy in the male is inextricably tied up with our concepts of masculinity and more general adequacy, failures in this area usually lead to considerable worry and self-devaluation Not infrequently such persons feel that something is profoundly wrong with them and that their hopes for marital happiness are destroyed A vicious circle is started, the fears and doubts about one's adequacy make one less adequate.

Frigidity in the female is the counterpart of impotence in the male Unlike impotence, however, frigidity is fairly common It has been conservatively estimated that fully one third of all women are relatively or completely frigid—never experience orgasm Although there are many operations performed each year designed to increase the sexual potency of females, the primary causes of frigidity are psychological and the frigidity apparently represents not an absence of sexual desire but a blocking, due to emotional conflicts Among the more important of these psychological factors are

a) Undesirable early training This is perhaps the most common factor leading to later difficulties in sexual adjustment When sexual relations have been emphasized during the important formative years as lustful, bad, dirty, and evil, inhibitions and attitudes are established which cannot be easily modified and which lead to a great deal of emotional conflict during marriage It is difficult to imagine how we can indoctrinate our children in the evilness of sex during the many years prior to marriage and then expect them to discard these attitudes suddenly and make a satisfactory adjustment to marriage

b) Lack of emotional closeness to the sexual partner Often frigidity results from feelings of insecurity, distrust, hostility, or other factors which lead to a lack of emotional closeness to the sexual partner. General feelings of affection, emotional security, and closeness to the sexual partner are very important to

the female, particularly to those in higher socio-economic levels. Similarly, overattachment or love for someone other than the sexual partner may lead to guilt feelings and other conflicts which interfere with sexual adequacy and desire

c) Marriage to a "marital moron." Where the sexual partner is rough or unduly hasty, or concerned only with his own immediate gratification, conditions are not conducive to sexual satisfaction for the female Where her first introduction to sexual relations takes place under such conditions, the pain, dissatisfaction, and sometimes disillusionment of romantic ideals may do well-nigh irreparable psychic damage

d) Fear. Fears of detection, pregnancy, syphilis, and similar factors are, of course, not conducive to sexual adequacy in the female Where the introduction to sexual relations is accompanied by haste, sordidness, discomfort, or fear of detection, these factors are apt to be immediately incapacitating as well as adversely affecting later sexual adjustment.

e) Latent or overt homosexuality As in the case of impotency growing out of latent or overt homosexual tendencies, frigidity may stem from the centering of erotic interests and desires around members of the same sex

Once a pattern of frigidity has been established in the female, it may be extremely difficult or impossible to modify it. Particularly is this true in relation to a particular male, although it is possible that the female may achieve sexual satisfaction with another male However, this usually involves the establishment of a truly satisfactory emotional relationship with the new person, and would not apply to the indiscriminate practice of trying out new sexual partners as one would new shoes to see if there is a possible fit For both impotence and frigidity, the only effective means of correction is usually the establishment of a really worth-while and intimate affectional relationship involving general confidence, security, and love.

In discussing impotence and frigidity, it is frequently difficult to distinguish between impotent or frigid individuals and those who have a low sex drive and are sexually apathetic in general. In the former, however, investigation will usually reveal psychological factors which are leading to the inhibition or repression of sexual desire or to the inability of the individual to experience sexual gratification despite his desire to do so

2. Satyriasis and **nymphomania** refer to exaggerated or excessive sexual activity in men and women respectively. Such individuals may evidence intense and almost continuous sexual desire and center their entire life around this activity

In the light of current thinking there is considerable question as to the meaningfulness of these terms There are wide individual variations in the strength and frequency of sexual desire The majority of males desire intercourse one to six times per week, but there are many individuals who engage in sexual relations several times a day over extended periods of time without apparent ill effects (Kinsey[68]) Similarly, Terman[120] found that a group of passionate wives experienced a desire for coitus averaging eight times as often as a group of nonpassionate wives Consequently, it is extremely difficult to draw a meaningful line between normal sexual desire and what we may properly consider excessive or abnormal sexual desire.

If there is an answer to this problem, it would appear to lie in psychological rather than in physiological considerations Where the individual experiences an almost insatiable sexual desire and centers his behavior around sexual pleasures as (1) an escape from his problems, (2) a compensation for various frustrations, and (3) a means of bolstering feelings of masculinity or femininity and adequacy, then perhaps we may properly speak of his sexual behavior as excessive in degree. Such excessive sexual demands may take place within the framework of marriage or they may involve a pattern of promiscuous or other deviant sexual behavior. In one case a 35-

year-old business executive had maintained a pattern of 10 or more relations per week over a five-year period involving more than 300 girls His thinking, interests, jokes, and general conversation were almost completely preoccupied with sexual themes, and he himself voluntarily came for clinical assistance, stating that he felt his life was distorted and unsatisfactory

3. **Promiscuity** is a rather broad term which ordinarily includes premarital and extramarital sexual intercourse, sexual delinquency, and prostitution

Premarital and extramarital sexual relations are inextricably bound up with social mores which not only are in a state of flux in our society, but vary from one socio-economic level to another Thus a full discussion of them is beyond our province It is thought-provoking, however, to note Kinsey's[68] estimate that about half of all married males have intercourse with women other than their wives at some time during their marriage

In the present discussion we shall confine ourselves to a consideration of certain dynamic aspects of sexual delinquency and prostitution. "Sexual delinquency" is used here to refer to promiscuous sexual relations of a transient nature which ordinarily end after the intercourse has taken place and typically involve girls under 18 years of age Although the girls may receive clothes, meals, gifts, or even money, these relations are essentially of a noncommercial character and such returns do not constitute the conscious reason for resorting to promiscuous sexual behavior Such behavior among young girls is considered a major social problem and an important factor in the spread of venereal disease

Since the studies of sexual delinquency are hopelessly inadequate in relation to the amount of such activity that occurs, the dynamics involved are not completely understood In terms of the information we do have, it appears that there are three major factors which enter into the etiology of sexual delinquency (Lion *et al* [79]):

a) Disturbed family relationships centering around rejection Children under such circumstances often feel neglected, unwanted, and lonely Broken homes, unhappy foster placements, and lack of adequate affection are propelling forces in converting neglected and deserted children into actual delinquents (Balassa[7], Harris[54], Koch[71]) To such girls the thrill of an "overnight romance" is often too much to withstand and offers an irresistible compensation in terms of feeling wanted, important, and loved Once the pattern is begun, it is easy to slide into habitual delinquent behavior involving several such incidents a week with different men.

b) Disturbed family relationships centering around extreme strictness and repressiveness Many delinquent girls come out of a family background of extreme strictness regarding sexual behavior and dates, which leads to considerable pent-up hostility and aggression As a result these girls swing to the opposite extreme of promiscuous sexual behavior, which represents a sort of defiance or lashing out against authority

c) Sexual delinquency as a part of more severe psychopathology Both of the first two factors lead to promiscuity as an attempt to overcome frustrations and anxieties which have grown primarily out of disturbed family relations These factors account for about one half of all sexual delinquency in young girls In the other half there are conditions relating to more severe patterns of maladjustment, such as mental deficiency, emotional immaturity coupled with strong dependency needs, alcoholism, drug addiction, antisocial personality, and the lowering of moral restraints in psychosis

It is interesting to note that in a study of 267 habitually promiscuous girls referred to the City Clinic in San Francisco, it was found that although these girls had had sexual experiences far in advance of their years, their information regarding sexual matters and general physiology was extremely incomplete and inaccurate and over 60 per cent of

them were relatively or completely frigid (Lion *et al*[79]).

The case below illustrates the development of this type of delinquent behavior

The patient's parents were divorced when she was seven This event upset her because she was attached to her father and was forced to live with her mother She felt rejected because her father remarried immediately after the divorce and seldom made any attempt to see her During the following years while she was living with her mother and her maternal grandparents, she rarely saw him, and when she did her stepmother was so jealous of any attention she received from her father that the entire situation was very unpleasant.

The patient's mother was an undemonstrative, rigid, puritanical woman who became "soured" on men as a result of her divorce from the patient's father To try to protect her daughter from being taken advantage of, she liberally indoctrinated her with the "evils" of sex and was very strict in the supervision of her dates Even when the daughter was 16 years of age, the mother would not let her stay out on a date beyond 9 00 p m The patient stated that she never really liked her mother, and bitterly resented her continual "meddling" and unreasonable supervision

Shortly after her 17th birthday, the patient ran away from her home and by lying about her age managed to obtain a job as a hat-check girl in a night club in a large city She states that she was so excited about this job that she could hardly sleep for several nights It seemed to her that now she would have an opportunity to associate with really important and sophisticated people who knew how to live and were not bound by the iron rules of stupid mothers Several days later she moved into a small apartment with another girl who had considerable influence upon her subsequent behavior

Since the patient was quite pretty, she was frequently asked out, and eventually accepted a date with a very nice looking middle-aged "wolf" who got her drunk on their first date and more or less forced intercourse upon her Although she did not enjoy the intercourse, he was most interesting and glamorous in her eyes, bought her presents and made her feel she was "really something" Since he seemed to expect sexual relations as a matter of course, and her roommate assured her that this was the right thing to do, she was unable to refuse him She had visions of marrying him and settling down in a small honeymoon cottage with a flower garden and raising a family When he soon tired of her and disappeared, she was terribly hurt.

Following this, she went out with a number of different men trying to "forget" Her roommate had advised her that the one sure way to forget one man was "in the arms of another" and she seems to have followed this advice rather faithfully. During this period she states that she did feel vaguely unhappy and guilty but that it was flattering to have so many men interested in her and to feel that she really "belonged" to the night-club set Her room was always filled with flowers and candy and other presents and her roommate was most approving of her "progress" She states that she readily rationalized that such patterns were conventional among "sophisticated people." In the course of several months she had intercourse with some 30 men and was eventually brought to the attention of juvenile authorities because of her age

Although promiscuity blends almost imperceptibly into prostitution, the latter is defined as the indiscriminate provision of sexual relations in return for money When it is realized that many prostitutes can handle twenty or more men per night, it becomes obvious that organized prostitution is a highly lucrative business. However, it is so closely tied up with underworld activities and political vice that it is very difficult to get any clear-cut picture of its incidence or of the people who become prostitutes So-called "houses" or "brothels" operate relatively openly in many areas, but in others intensive civic agitation has eliminated such places and the prostitutes who continue to operate do so

more or less individually. The actual number of prostitutes in the United States is unknown but undoubtedly runs into many thousands. According to Kinsey's[68] findings, about 69 per cent of the total white male population have some experience with prostitutes Many of these are single experiences, however, and prostitutes account for less than 5 per cent of the total sexual outlet of the male population In countries where prostitution is governmentally controlled, it is a more widely utilized source of sexual discharge

Although many of the etiological factors operating in promiscuity carry over into actual prostitution, the latter typically involves a more chronic picture of personality maladjustment and generally distorted life values Interestingly enough, many prostitutes are married. In some manner, however, they seem to be able to reconcile their monetary sexual activities with their marital affections In most cases the female prostitute does not experience orgasm or become emotionally aroused during a professional contact It is strictly a matter of business and financial remuneration Many prostitutes will engage in oral-genital contacts for purposes of money, but will not engage in such activities with their boy friends or husbands because they consider them immoral (Kinsey[68]).

As in promiscuity, we again find a large percentage of mentally deficient girls, antisocial personalities, and other more serious psychopathological types. However, many prostitutes are not mentally ill in terms of any obvious symptoms; some are even college graduates, come from apparently good families and seem somehow to convince themselves that prostitution is a perfectly acceptable business venture Some of them accumulate considerable sums of money and later marry into respectable families, although more typically they are in continual conflict with the law and are exploited by various ruthless underworld characters Also they are exposed to and usually contract various venereal diseases.

There are, of course, male prostitutes—particularly for homosexuals—as well as female prostitutes, but they are relatively rare and are usually found only in large cities

4. In **rape**,* too, sexual behavior is directed toward an essentially normal sex object, but the behavior takes place under antisocial conditions The number of reported cases of rape in the United States each year varies in the neighborhood of 5000 (*Time*[125]) As we might expect, it is almost exclusively the male who is the offender

In general, rape apparently may occur in connection with any conditions which interfere with either the development or maintenance of moral restraints in some aggressive, hostile personalities In a study of 250 sex offenders in New York City, it was found that sexual offenses involving force were commonly associated with antisocial personalities with strongly aggressive tendencies and past records of aggressive antisocial activities (although not always of a sexual nature) (Apfelberg[3]) Here again, of course, we see both a failure to develop adequate moral restraints in the first place and a lowering of restraints in connection with sexual urges and hostility Often the rapist shows very little aesthetic preference in his choice of sex objects Sometimes he simply decides that he will rape the next woman he comes to, conditions permitting East[34] cites the case of an unprepossessing old maid over 70 years of age who was raped and then murdered by a man who was not mentally deficient, drunk, or suffering from a psychosis In other cases rapists are found to be schizophrenics, organic psychotics, or others with psychopathology which has lowered moral restraints

Rapists frequently inflict serious injuries upon their victims and sometimes even brutally murder them It is not uncommon for women who struggle against their attackers to

* The present discussion will not consider rape involving sexual relations with girls under 18 years of age, in which the girl voluntarily participates or even takes the initiative in the relationship

receive numerous physical injuries such as broken ribs, fractures, bruises of the breasts and abdomen, and various local injuries due to penetration Occasionally several offenders join together, as in the case of juvenile gangs, and rape the victim consecutively. The psychological as well as physical damage in such cases is apt to be considerable. Such experiences usually have disturbing effects upon the victim's marital relationships, often being upsetting to the husband as well as the wife Particularly where the husband has been forced to watch the rape of his wife, their marital relationships thereafter may be severely disturbed. Because of the physical and psychological injury to rape victims, offenders are treated severely by society and are usually given long terms of imprisonment The imprisonment itself seems to have little value aside from protecting society from further ravages by the offender while he is imprisoned, but since there are no effective remedial procedures available, society has little choice However, officials must exercise great care in handling these cases Not infrequently women who have been seduced with promises of love and marriage and who subsequently find themselves pregnant and deserted have been known to make false accusations of rape which have resulted in imprisonment for the men involved.

5. **Incest** refers to culturally prohibited sexual relations between certain family members such as brother and sister or father and daughter There may be many fantasies, particularly during the adolescent period, of sexual relations with brothers, sisters, mothers, or fathers, but actual incest is not common

Although certain groups have approved various forms of incestuous relationships (at one time it was the established practice in Egypt for each king to marry his sister), most groups have definite prohibitions against incest Such prohibitions have often been attributed to the recognition of dangers relative to inbreeding However, the prevalent opinion among biologists at the present time is that these alleged dangers have been greatly exaggerated. Only when there are latent defects in the ancestral line do the marriages of close relatives result in defective offspring. Such inbreeding will not result in the introduction of any defects which are not already present in the stock and is therefore considered safe in normal stock Consequently, it is now thought more likely that prohibitions against incest have ordinarily grown out of certain practical everyday considerations For example, marrying outside the family has certain definite advantages such as the assurance of a larger group of allies in economic and other activities Incest, on the other hand, has certain definite disadvantages, such as father-and-son rivalries which might lead to the destruction of the family group

Probably the most common form of incest in our society is between brothers and sisters Such incestuous relations may occur in connection with low general family morals or as a result of mutual tendencies toward sexual exploration. Particularly where brothers and sisters share the same bedroom during the preadolescent or adolescent period there is a danger of sex experimentation Occasionally older brothers and fathers force sexual relations upon younger female members of the family This is frequently a severe traumatic experience for the girl and may lead to the development of severe guilt feelings and an undesirable attitude toward sex Even where the girl apparently tolerates the experience or even actively participates in it at the time, later learned social inhibitions may lead to a re-evaluation of this activity and to severe self-devaluation

Occasionally incestuous relationships, particularly between father and daughter, occur in connection with serious mental illness on the part of the parent, senile deterioration, manic reactions, alcoholism, and paresis are some of the conditions leading to such a lowering of moral restraints.

It is not uncommon in mental clinics to encounter patients who have severe conflicts

over their previous incestuous relationships or their fantasy desires in this direction Such conflicts are likely to be engendered in families where there are overly intimate general affectional relationships and the young adolescent is still encouraged to behave as his mother's "little lover" or the daughter as the father's "girl." Where incestuous relationships actually occur, the aftereffects are in general more severe for the female (Sloane and Karpinski[116])

The following case illustrates a rather severe reaction to incestuous relations

The patient, a 20-year-old high-school graduate, had been subjected to incestuous sexual relations by an older brother from about the age of 12 to 15. She states that during this period her family was extremely poor and she and her brother shared the same bedroom. Apparently also the moral level of the family left a great deal to be desired, for from the age of 15 to 17 her father forced sexual relations upon her as well

During her last year in high school she took a course in mental hygiene during which the teacher discussed the harmfulness of incestuous relations with considerable emotionality, suggesting that the fathers participating in such activities should be summarily hanged. The patient states that although she had severe guilt feelings about her incestuous relationships, it was not until this talk that the full "evilness" of herself and her brother and father was brought home to her For several days she contemplated suicide but finally gave up this idea

Following this she could hardly stand the sight of her father—he appeared loathsome to her, "like a snake or something like that" She also stopped going out on dates, stating that she just didn't like men any more—they all seemed alike to her—and she didn't want to have anything further to do with them After her graduation at 18, she obtained a job as a stenographer and moved into an apartment with an ex-classmate, also a stenographer. Since her roommate was not pretty, she had few dates and spent most of her leisure time with the patient Over a period of several months they became very fond of each other and enjoyed doing things and going places together The patient states that she doesn't know just how it happened, but one night after attending a party where they each had several drinks they found themselves kissing each other This apparently led to a pattern of homosexual relations which continued over an 18-month period

Then the patient met a homosexual youth at a party and they apparently became quite fond of each other The patient states that they were good friends and could "feel at home in each other's company without getting involved in sex Of course in the distant future we may try sexual relations and if this works out even get married." This apparently represented the patient's first attempt to return to a heterosexual pattern It is interesting that it involved a homosexual partner However, this first attempt almost failed, for her roommate became extremely jealous and reported to the patient that her boy friend was planning to get her pregnant as soon as possible so that he could force her to marry him In the light of her previous relations with men, this news proved extremely traumatic to the patient and she became quite tense and disturbed. The following day she came voluntarily for psychological help

6. Masturbation refers to the self-stimulation of the genital organs for purposes of sexual pleasure. It is the most common sexual outlet during adolescence and young adulthood, ordinarily giving way to heterosexual relations after marriage However, it may be resorted to whenever the individual is deprived of normal heterosexual opportunities, as when a man's wife is away or does not desire as frequent sexual relations as the male would like to have. Although accurate statistics are unavailable, a high per cent of both males and females are estimated to have had masturbatory experience, most psychiatrists and psychologists consider it a normal sexual outlet in our society, which most of us utilize to some extent on our way to adult heterosexual behavior. It can be considered of path-

ological significance only when it fails to yield to or interferes with the establishment of normal heterosexual relations, or when feelings of fear and guilt centering around it lead to serious personality conflicts.

As a result of the taboos and threats centering around masturbation, many millions of young people have lived in continual mental conflict over this problem. Most of us have been taught that masturbation is a vile habit that will undermine our health and possibly lead to insanity or have other terrible aftermaths. In fact, almost everything from weak eyes to impotence has at some time been attributed to masturbation. Mentally ill and mentally deficient persons have often been used as horrible illustrations of the effects of masturbation, and at one time hospital authorities maintained a separate ward for patients whose insanity was presumably due to such practices. Such threatening information has often been presented in such a way as to make it appear that self-respecting people don't do such things and that all that is needed is a little self-control. Too often, then, the youth fights against it and promises himself that he won't give in again; then the sexual tension mounts, leading to failure of his resolve, and self-devaluation follows. Now he feels guilty about his evil behavior and is convinced that he has no strength of character or he would not have masturbated. So he makes new and stronger resolutions and the whole cycle is repeated. It is difficult to imagine anything more admirably suited to permanent personality damage, for over a period of time a circular conflict of this type leads to strong feelings of guilt and inferiority and intense fears concerning the possible harm that he is doing to himself.

In addition, he may fear that the consequences of his immoral behavior may be detected by others. (One high-school physical education teacher told his students that masturbation could be detected "by the baggy appearance of the genitals.") And so the threat of social disapproval and scorn is added to the picture. Since such fears may seriously interfere not only with the individual's personal and social adjustment but with his subsequent marital adjustment, it is perhaps worth emphasizing that masturbation as practiced by the average adolescent has no known physiological harmful effects.

Under certain conditions masturbation may be considered undesirable, but in such instances it is usually part of a larger picture of maladjustment. Children who feel unhappy, lonely, and unwanted may center too much of their activity around masturbatory practices in an attempt to compensate for their frustrations. Occasionally masturbation may even be used as a form of negativistic or hostile behavior. This is well illustrated in a rather extreme case involving a group of about 25 boys in a 6-A class who openly masturbated en masse before their female teacher (Stirt[119]). The boys came from underprivileged homes and psychiatric investigation revealed that their behavior involved a sort of mass protest based on feelings of frustration, hostility, and inadequacy.

Similarly, where individuals continue masturbation into adult life at the expense of normal heterosexual behavior, it is usually symptomatic of more serious underlying maladjustment. The individual may be extremely shy and fearful of the opposite sex; or he may be a rather cold, withdrawn individual who finds such an intimate relationship with another person disturbing; or he may consider masturbation the lesser of several sexual evils. A man may be in love with someone other than his wife, or he may find his wife physically unattractive and consequently prefer the more exciting and desirable persons depicted in his masturbatory fantasies. Often, of course, the fantasies that typically accompany masturbatory activities are of diagnostic value in determining the nature of the maladjustment. Men with strong homosexual inclinations may fantasy male figures and genitalia, and those whose sexual behavior centers around more deviant practices may fantasy

being hurt or hurting others or exhibiting themselves, and so on.

Masturbation, then, may be of pathological significance as part of a larger picture of maladjustment Ordinarily, however, it may be considered a normal phase through which most of us pass in the development of adult heterosexual behavior and one which may be reverted to under conditions of deprivation Usually the only undesirable features are the worry, guilt, and self-devaluation so frequently associated with it.

7. **Homosexuality** refers to erotic relationships between members of the same sex. These relationships may vary from homosexual fantasies through kissing and mutual masturbation to fellatio, cunnilingus, and pederasty.

Contrary to public opinion, it is not possible to divide people into two clear-cut groups—homosexuals and heterosexuals Rather these terms represent the extreme poles of a continuum, and in between we find many individuals whose experiences and psychic reactions combine both heterosexual and homosexual components, as the following statistics indicate (Finger[39], Kinsey[68]).

50 per cent of the adult male population has neither overt nor psychic experiences of a homosexual nature after the onset of adolescence

13 per cent of all males react erotically to other males without having overt homosexual experiences after the onset of adolescence

37 per cent of all males have homosexual experience to the point of orgasm after the onset of adolescence

50 per cent of all males who remain unmarried to the age of 35 have had overt homosexual experience to the point of orgasm since the onset of adolescence

18 per cent of all males reveal as much of the homosexual as the heterosexual in their histories

8 per cent of males engage exclusively in homosexual activities for at least three years between the ages of 16 and 55

4 per cent of males are exclusively homosexual from adolescence on.

Comparable incidence figures are not available for females, but Davis[27] found that approximately half of a group of 2200 women, including married women selected from civil life, women's clubs and colleges, and unmarried college graduates, had at some time experienced intense emotional relationships with other women, and more than one fourth admitted that the relationship was carried to the point of overt homosexual behavior. Since emotional relationships among women are more readily condoned than among men, it is thought that the true incidence of homosexual behavior among women may be somewhat higher than the findings from Davis' study would indicate

Homosexuality has existed throughout man's recorded history, and among some peoples it has been more or less tacitly accepted. In later Greece and Rome, for example, such practices were so common that homosexual prostitutes existed openly, "masculine" women were available for women and "effeminate" men for men However, most groups have condemned homosexuality as socially undesirable; in our own society homosexuals are subject to arrest and imprisonment This social attitude has been strongly maintained despite the fact that even those who are predominantly homosexual, with little or no heterosexual experience, apparently manifest no other evidences of serious personality deviation than we would expect to find in a comparable group of heterosexuals They may be of superior intelligence, well educated, and highly successful in their chosen occupations Many of them have made outstanding contributions to our culture in music, art, and other fields Not a few of the notable figures of history, including Alexander the Great, Michelangelo, and George Sand, are thought to have been homosexuals

Inevitably it is difficult for homosexuals to make adequate occupational, sexual, and general social adjustments, since society does disapprove so severely of their activities Many live in continual fear of detection, loss of

employment, and social disgrace even though they feel they have a right to their form of sexual adjustment. Others feel that their sexual desires are entirely wrong they are in constant conflict within themselves Especially where the homosexual is alone and not affiliated with any organized group of homosexuals, he tends to be continually at war with himself and to feel insecure and apprehensive

Little is known about organized homosexual groups, except that such groups do exist. Where the homosexual has become affiliated with a well-organized group, there is a tendency for him to think of his problem as a group problem and therefore a social rather than an individual one In such cases there may be little fear or conflict and the individual may accept his homosexual behavior as a perfectly natural form of sexual expression, or even actually take pride in his homosexual behavior and consider himself "emancipated" from and superior to the conventional heterosexual morality

However, many homosexuals who seem to accept their problem on a nonemotional level or even take pride in the alleged superiority of homosexual over heterosexual behavior, are overzealous in presenting rationalizations designed to demonstrate the intellectual, cultural, and aesthetic superiority of homosexuality

The following passage by a female homosexual is of considerable value in giving us insight into the problems faced by the homosexual individual.

"To those whose sex life is based on heterosexual relationships, the homosexual is a grotesque, shadowy creature—a person spoken of with scorn, pity or lasciviousness The person so spoken of is often in the audience. If you are not one of us, it is impossible to realize our feelings when this occurs It is incredible to us that a well educated girl could make the following remark. 'What do they look like? I wonder if I've ever seen one?' . . .

"What is it like to be this way?

"You are always lonely. It makes no difference how many friends you have or how nice they are Between you and other women friends is a wall which they cannot see, but which is terribly apparent to you This wall represents the differences in the workings of your minds.

"Between you and men friends is another difficult misunderstanding Very few men desire platonic friendships, the only kind of which you are capable so far as they are concerned The endless bitter disagreements with them cause many of us to renounce their companionship entirely Very few men understand the need we have for their friendship and the aversion we feel for sexual love Unable to find love or its most acceptable substitute friendships, we frequently become psychiatric cases You cannot keep a healthy state of mind if you are very lonely

"The inability to represent an honest face to those you know eventually develops a certain deviousness which is injurious to whatever basic character you may possess Always pretending to be something you are not, moral laws lose their significance. What is right and wrong for you when your every effort is toward establishing a relationship with another which is completely right to you, but appallingly wrong to others?

"How do homosexuals feel about one another?

"One of the saddest facts in this entire picture is that we seldom like one another On the surface this appears ridiculous, but there are good reasons for it. . . ." (MacKinnon[85], p 661)

Homosexual relationships may involve various types of sexual patterns A male homosexual may always take a female sexual role, or he may play a female role at one time and a male role at another. Similarly a female homosexual may play a male role only or alternate between male and female roles with different sexual partners. Of course there are many homosexual relations which occur for purposes of immediate sexual discharge in which such role identification is reduced to a minimum.

Considerable emphasis has been placed upon the "femininity" of male homosexuals and the "masculinity" of female homosexuals. For example, high-pitched voices, effeminate mannerisms, "swishing" in walking, artistic interests, and a tendency to enter so-called feminine occupations such as dress designing, hairdressing, music, and various entertainment fields, have often been attributed to male homosexuals. Although many homosexuals do manifest such characteristics, there are more who do not. On the other hand, it is important to note that only homosexuals usually display such extreme feminine behavior, appearance, and interests. But many homosexuals are found in military life, professional athletics, and other so-called "masculine" fields of endeavor, revealing no personality mannerisms or characteristics which can be readily identified as peculiarly feminine.

In short, there are no particular physical or immediately obvious personality characteristics by means of which all homosexuals can be identified.

"Fortunately for us, there is no identifying mark. Contrary to what some may think, we have no secret means of recognizing one another. Many women, not homosexual at all, wear suits a lot, cut their hair short and seem, on the whole, very unfeminine. The active homosexual often makes herself look very attractive in order to please the person she is trying to charm. Appearances have much less to do with it than most people assume they do." (MacKinnon[85], p. 661)

However, a few homosexuals who identify themselves almost completely with members of the opposite sex may not only be extremely "masculine" or "feminine" in the general personality make-up, but they may even dress in the clothes of the other sex. For example, a male homosexual may wear lipstick, nail polish, high heels, expensive clothes, including furs, and otherwise appear as a very attractive and even beautiful woman. This is done not only so that he will appear more attractive to other men, but also because his female identification is so complete that he feels





A transvestite in his male clothing (left), and in his female clothing (right). He came to a psychiatric clinic requesting that the physician give him a certificate stating he was a female. He was well developed and had a deep voice, normal male genitalia, and masculine physical proportions and distribution of hair, including beard. His I.Q., obtained on an Otis test, was 95. He was married. There was no history of traumatic experience or sexual gland injury. He stated that since earliest childhood he had had cravings to be a girl. There were several other abnormalities besides his transvestitism, not typical of transvestites as a group. A Rorschach test indicated compulsive-neurotic tendencies, and he showed definite psychopathic trends. He was exhibitionistic, narcissistic, and displayed both sadism and masochism. He took ecstatic, fetishistic delight in the numerous trinkets he wore. There was an utter callousness and emotional frigidity, with pride in his way of life and rejection of any responsibility to society. (Summary of a case reported by Olkon[95])

more comfortable and capable of achieving greater sexual pleasure in a feminine role. This condition is referred to as *transvestitism*, and such individuals usually show a long history of identification with the interests and attitudes of the opposite sex.

In general, there have been and still are two opposed views concerning the etiology of homosexuality. The orthodox view has been that homosexuality has a constitutional basis in the form of either direct genetic inheritance or physiological imbalance, such as endocrine imbalance. Opposed to this is what we might term the psychological viewpoint, in which emphasis is placed on psychological rather than constitutional factors. This viewpoint has been maintained by most psychiatrists and psychologists. Let us examine these two views in more detail.

Constitutional approaches have in general emphasized the following points in the etiology of homosexuality.

a) Heredity. Here the assumption has been that homosexuality is transmitted via recessive genes. As evidence, the fact is cited that many families show a rather high incidence of homosexuality over a period of two or more generations. It is impossible in the light of present evidence to evaluate the importance of genetic factors in homosexuality, but as Kinsey[98] points out, hereditary theories "must allow for the fact that some individuals change from exclusively heterosexual to exclusively homosexual patterns in the course of their lives, or vice versa." (p. 663)

b) Endocrine balance. Many investigators have emphasized endocrine imbalance in the etiology of homosexuality, pointing out that male homosexuals show a high percentage of female hormones in the blood stream and the female homosexuals a high percentage of male hormones. For example, Myerson and Neustadt[94] obtained disproportionate ratios in 25 of 29 homosexuals. In the light of such findings Green and Johnson[46] conclude that an abnormal androgen-estrogen ratio is to be considered a sign of homosexuality.

Such evidence of endocrine imbalance would appear to be of crucial etiological significance were it not for several other facts: (1) many homosexuals do not reveal such endocrine imbalances; (2) many nonhomosexuals show similar endocrine imbalances; (3) individuals may shift from a homosexual to a heterosexual pattern or vice versa even though the endocrine pattern apparently remains constant; (4) shifts in the endocrine balance might conceivably result from the sexual behavior rather than causing it; and (5) treatment with sex hormones may be used to change the endocrine balance, but this treatment does not ordinarily modify the direction of the sexual behavior.

Constitutional factors undoubtedly play an *interactional* role in homosexuality; beyond that we cannot speak with certainty. However, even in cases involving hermaphroditism (a condition in which the individual is possessed of well-developed genital organs of both sexes), where there is an anatomical basis for the ambiguous sexuality, the pattern which develops cannot be understood solely in terms of constitutional factors.

Two sisters, aged 24 and 26 years, were to all appearances normal young women. They had feminine voices, smooth skin, no beard, well-developed breasts. They had been reared as girls and had feminine interests. However, medical examination revealed that one sister had a bifid scrotum with two well-descended testes, whereas fallopian tubes and ovaries were completely absent. She had never been sexually attracted by girls, had married once, and later obtained a divorce, and was in love with another man. The patient insisted upon operation to remove the male organs, following which she reported a reduction in sexual desire by about one-half. A subsequent marriage was successful. The other sister showed a similar medical and personal history. If these girls had been legally declared males, they would automatically have been homosexuals! (Summary of case from Witschi and Mengert[131].)

As a result of a study of 84 cases of hermaphroditism from the literature, Ellis[35] concluded that the great majority of these cases assumed a sexual role that accorded primarily with the individual's masculine or feminine upbringing rather than with his or her internal and external somatic characteristics

It is probably not surprising that many homosexuals themselves seize upon constitutional theories of homosexuality and use them as justification of their behavior For how, they argue, can a person with such a constitutional make-up be held responsible for his deviant sexual behavior?

Psychological views are usually based on the concept of the gradual differentiation of sexual behavior, which, despite masturbatory activities and possible homosexual incidents, typically culminates in heterosexual behavior As we have noted, however, there is no *a priori* assurance that such heterosexual behavior will develop without specific social encouragement, and in societies which have encouraged homosexuality, sexual development has been found to be readily directed toward such homosexual patterns Thus psychological etiological considerations are primarily a matter of what early experiences the individual has had Among the major conditioning experiences which have been found to be conducive to the differentiation of sexual behavior in a homosexual rather than a heterosexual direction are the following

a) Early homosexual experiences Early seduction in childhood before sexual behavior is well differentiated in heterosexual directions has been emphasized by many investigators. For example, East found seduction in early youth as the commonest single environmental factor in a series of 79 homosexuals (East[34]) As Greenspan and Campbell[49] point out, however, it is difficult to see how such early experiences can have such a profound influence in determining the entire direction of later sexual development unless they are reinforced by continual pleasurable repetition, or unless such experiences serve to meet certain emotional needs for security and acceptance in addition to sexual pleasure In this connection it is interesting to note that Greco and Wright[45], in a study of 10 reform-school inmates who were chronic homosexuals and a control group of 10 normals, found that each of the homosexuals had had intimate association at an early age with a homosexual who had been a source of comfort to him at a time when he was in dire need of emotional and social security Segregation of children in boarding schools, military schools, and like establishments is, of course, conducive to the occurrence of youthful homosexual experiences

b) Rearing a child as a member of the opposite sex Parents may particularly desire a daughter, for example, and when a son is born bring him up in as girlish a manner as possible This may extend to long hair, painted fingernails, girls' clothing, and the inculcation of typical feminine attitudes and interests The following case illustrates this pattern of identification with the opposite sex

"Mr. K T, aged thirty-six years, liked to dress in women's clothes, and he came to the clinic with the request that he be operated on and have his genitalia removed and a vaginal-like orifice substituted He was not psychotic, had a responsible position, and apparently adjusted well, except for his concern over the above-mentioned problem His mother was very eager to have a girl-child, but had four boys, the last one being the patient The mother, feeling disappointed, kept the patient away from the boys and dressed him like a girl She gave him dolls to play with and taught him all the arts taught to a girl This farce was kept up to the point that when he was six, he was sent to a girls' school dressed as a girl. When he was seven, 'I had the greatest disappointment of my life My father took me to a barber and had my beautiful hair cut off When I got home, both my mother and I cried The next day I was sent to a boys' school, and I did not like to be dressed as a boy My pants were rough, and the blouse was coarse, and I delighted in going home, tak-

ing off these clothes, and putting on my bloomers and dress, with its bows and ribbons.'" (Kraines[78], pp. 119-120)

This is a rather extreme example In far more cases, the feminine attitudes and interests would be engendered in a more subtle way, so that the feminine identification might grow more or less unconsciously. The same factors apply, of course, in the case of a girl reared as a boy

c) Close identification with the parent of the opposite sex. Where the child closely identifies himself with the interests and emotional attitudes of the opposite parent and strives in every way to emulate him or her, he may show many homosexual tendencies which may be crystallized by overt homosexual experiences. Often loss of the father in early childhood is found in the background of male homosexuals conforming to this pattern (Apfelberg[8])

d) Unhappy social experiences with members of opposite sex Where the boy or girl is ridiculed, rebuffed, and humiliated in his efforts to approach the opposite sex, he may turn toward homosexuality as a substitute source of affection and sexual outlet Similarly, early heterosexual experiences taking place under unfortunate conditions may have a comparable effect, as we saw in the case of the girl who had been subjected to incestuous relationships with her brother and her father

e) Prolonged heterosexual frustration. In prisons, correctional institutions, and other situations where the sexes are segregated over long periods of time, there are marked increases in homosexual behavior. Although such homosexual activities may be given up when heterosexual contacts again become available, some individuals are unable to reestablish heterosexual contacts and seemingly prefer homosexual, others combine both in their later sexual activities (Karpman[63])

f) Castration anxiety. Psychoanalytic views have emphasized early male fears relating to castration which are reinforced by the shock of viewing female genitalia Presumably the idea of being without a penis is too anxiety-arousing, and they consequently go in search of a "girl with a penis" (Fenichel[38]). In this sense, the homosexual male is so set on the possession of a penis that he refuses to do without it even in his sexual partner. In females, according to psychoanalytic theory, the sight of the male sex organs may lead to fears of impending violation or to envy or other thoughts concerning the differences in physical appearance. As a result, these fears and thoughts may interfere with sexual enjoyment and make sexual relations possible only when they can be achieved away from the presence of a male genital organ.

Although homosexual behavior may occur in connection with, and may even be an important precipitating factor in, the development of conditions such as alcoholism, paranoid schizophrenia, and other psychopathology, there is no direct causal relationship in either direction between homosexuality and psychopathology The homosexual is not typically mentally ill, nor are the mentally ill typically homosexual Of course, homosexuals may become mentally ill As we have seen, the general social conditions under which they have to live may place extreme pressures upon them and make any effective personality adjustment most difficult One can imagine how difficult it would be if such extreme social restrictions and threats were applied to heterosexual behavior, with homosexual patterns the only ones condoned by society

In passing we may note that in addition to their other difficulties, adult homosexuals are often the victims of youths who prey upon them for purposes of robbery or "sport" such as beating them up. And occasionally what starts out to be a "shakedown" ends up as a murder In such instances the youth usually has considerable latent homosexuality in his own make-up, and is motivated by unconscious homosexual desires as well as robbery In the sequence of events the two usually go to the homosexual's apartment, where the youth

is given a few drinks and then submits himself to some homosexual act Much to his amazement, however, he finds the act pleasurable and in the tremendous anxiety aroused by this self-revelation of his own homosexual inclinations he may experience what is known as *homosexual panic* he may become panic-stricken and blindly attack the homosexual with anything at hand This point is well brought out in the following case·

"Take the case of Y for example He accompanies his prey to his apartment The robbery idea was scotched by the intended victim by virtue of the fact that the latter lavished money and gifts without reluctance He had come to loot but remained to live in the lap of luxury. Eventually he sought to sever the relationship on the grounds that he could not accept his benefactor's generosity longer In an effort to make him reconsider, the homosexual plied him with drinks, then attempted the usual relationship (fellatio). The defendant resisted, whereupon a scuffle ensued 'I sort of went in a daze,' he explained—'I remember grabbing the knife, that's all' He remained to call the ambulance, however, then fled Viewed from the standpoint of psychodynamics, we have to look at these facts The defendant could have satisfied his economic needs indefinitely Likewise, by only yielding this one last time, he could have merely walked out in the owner's absence, thereby avoiding the tragedy Another alternative would have been to feign a change of intentions and then later make other arrangements. But it was otherwise It seems to us quite logical to assume that he was seized by an overwhelming fear of succumbing to actual reciprocation of the homosexual affection." (Cassity[21], p 299)

The treatment of homosexuality is complicated by social considerations and becomes an extremely difficult matter Since society considers homosexuality as undesirable and even criminal, and since the homosexual has such a difficult and precarious adjustment at best, it would appear desirable for him to change to heterosexual patterns if this were possible But although psychotherapy has proved effective in changing the sexual patterns of some homosexuals, the majority are not readily amenable to such treatment. Once homosexual patterns have become deeply rooted, it is about as difficult to change them to heterosexual patterns as it would be to change a heterosexual into a homosexual Yet if therapy is directed at helping the individual to accept himself and his homosexual patterns and learn to avoid difficulty with the law—which is a therapeutic pattern receiving increasing emphasis—the therapist takes the responsibility of exposing other members of society to the advances of the homosexual To solve this dilemma, many therapists feel that the way to protect both society and the homosexual is not through imprisoning the homosexual or trying to change his sexual patterns to heterosexual ones, but by encouraging participation of the homosexual individual in homosexual groups. However, the desirability and feasibility of such an approach remain to be ascertained In any event there is a growing conviction that our present method of sending "vice squads" to track down homosexuals and imprison them neither helps the homosexual nor protects society

8. In pedophilia the sex object is an immature child The sexual intimacy usually involves either manipulating the child or a partial or complete penetration of the child. Occasionally the child is induced to manipulate the sex organs of the pedophiliac, or, in instances of homosexual relationships between the adult male and a young boy, to engage in mouth-genital contacts or in sodomy. Most pedophiliacs are men, although such practices occasionally involve women

This group of offenders is made up of types who are highly diverse in relation to age, cultural background, and the general circumstances which surround their offenses Most of the older offenders have been or are married, and many have children As a group, pedophiliacs appear to be superficially self-assertive and aggressive (Apfelberg[3]).

The dynamics in pedophilia are not fully understood, although like the other deviant sexual patterns, it seems to be a matter of faulty psychological development, reflecting conditions which for some reason have interfered with the development or maintenance of normal adult sexual relationships For example, antisocial personalities, as we have seen, are characterized by both a failure to develop mature sexual patterns and a lack of moral restraints. The combination of these two factors makes such individuals especially liable to sexual offenses (Ruskin[107])

In other instances, we are dealing again with individuals who feel inadequate in their approach to the opposite sex and have an intense fear of rejection and humiliation Consequently, these individuals concentrate their attention on children as a safer means of meeting their sexual needs and avoiding possible failure and self-devaluation Often in this group we find young male offenders. Others are older men who have lost their wives; in this case fears concerning impotence may lead to hesitancy in approaching the opposite sex and to the use of children as a safer way of demonstrating potency

The third major dynamic force involves conditions which weaken the inhibitory forces of the personality, such as alcohol, paresis, and senile and arteriosclerotic changes. In fact, pedophilia and exhibitionism are the most common sexual offenses committed by senile and arteriosclerotic patients (Ruskin[107]) Here, of course, there may be a combination of regression, fear of impotence, and a lowering of ethical and moral restraints

Society considers pedophilia to be a serious offense, and it is punishable in most states by long prison confinement. Although the confinement in itself probably does little to modify the behavior of the sexual deviate, it does protect society Since pedophiliacs may physically injure the children in the course of their activities as well as cause almost irreparable psychic damage, interfering with later normal sexual adjustment of the child, such harsh measures seem justified until more effective psychotherapeutic facilities are available

However, in dealing with the sexual offenses by older people, Kinsey[68] adds a warning note. He emphasizes the decline in erotic reaction, the loss of capacity to perform, and the reduction of the emotional life of the individual to such affectionate fondling as parents and especially grandparents are wont to bestow upon their own (and other) children Many small girls reflect the public hysteria over the prospect of "being touched by a strange person, and many a child who has no idea at all of the mechanics of intercourse interprets affection and simple caressing, from anyone except her own parents, as attempts at rape In consequence, not a few older men serve time in penal institutions for attempting to engage in a sexual act which at their age would not interest most of them, and of which many of them are undoubtedly incapable" (Kinsey[68], p. 238)

9. **Bestiality** is a sexual deviation in which animals are used for the achievement of sexual excitation and gratification The actual sexual pattern may involve masturbation by means of friction against the animal, fellatio, masturbation of the animal by the human subject, or actual sexual intercourse Practically all large domesticated animals usually found on farms, such as dogs, calves, and sheep, are commonly involved Occasionally ducks, chickens, and geese are also utilized. According to Kinsey's[68] figures, about 1 male in 12 or 14 of the general population has had sexual experience with animals Among boys reared on farms about 17 per cent reported experiencing orgasm through animal contacts and another 23 to 33 per cent admitted some sort of animal contact.

Sexual contacts with animals were apparently a social problem even in ancient times, for there are well-established taboos in the Old Testament and in the Talmud against such practices (Kinsey[68]) In some of these older codes it was permissible to have sexual

relations with certain animals but contact with others was punishable by death In general, however, society has frowned upon bestiality In our own society, it occurs primarily in rural areas, where it is often learned from examples set by other boys in the community or by experimentation after observing coitus among the animals themselves. Many people find it sexually stimulating to observe coitus among animals, and it is not surprising that many farm boys make some sort of identification with the male animal and attempt to replace him in such relations Undoubtedly the lack of adequate heterosexual opportunities in many isolated farm areas also contributes to the substitution of animals for sexual purposes General emotional attachments to animals such as dogs can become quite strong, and as we might suspect, very strong affectional bonds may be established between the boy and the particular animal with which he has such relations

Where opportunities for normal heterosexual intercourse are not available, bestiality has usually been more or less condoned However, it may be considered definitely pathological where the individual prefers sexual relations with animals when heterosexual outlets are available This may occur as a result of the strong previous establishment of bestial patterns, or in somes cases may reflect fear and inadequacy in approaching members of the opposite sex. Here, of course, the individual's fear of rejection and humiliation by the opposite sex is similar to that in pedophilia, and as we shall see, in exhibitionism and fetishism It is of interest to note that of the psychotics who commit sexual offenses, it is those with organic psychoses who are most prone to bestiality (Ruskin[107]).

10. Exhibitionism is a deviation in which the achievement of sexual pleasure is through the exposure of the genitals in public or semipublic places, usually to members of the opposite sex or to children. Sometimes the demonstrations are accompanied by suggestive gestures or masturbatory activity, but more commonly there is only exposure of the genitals

The exposure may take place in some secluded location like a park, or in a more public place, such as a department store, church, theater, bus, or streetcar In cities the exhibitionist often drives his car by schools or bus stops, exhibits himself while in the car, and then drives rapidly away In many instances the exposure is repeated under fairly constant conditions, such as only in churches or buses, or in the same general vicinity and at the same time of day Rickles[108] cites the case of a patient who always exhibited himself at the top of the escalator of a large department store The sex object too is usually fairly consistent for the same patient—ordinarily a stranger of the opposite sex, falling within a particular age range

Exhibitionism is most common during the warm spring and summer months and occurs primarily among young adult males. Practically all occupational groups are represented, including engineers, teachers, students, salesmen, mechanics, and unskilled laborers. Among women the exhibition of the genitals is relatively rare, and those cases that do occur are less likely to be reported to the police than are offenses by male exhibitionists. Of course many of the young males are not immediately reported, and not infrequently —especially in theaters—are encouraged by their victims

A rather handsome 17-year-old boy had been seating himself beside girls and women in darkened theaters and then exhibiting himself and masturbating He had been repeatedly successful in obtaining approving collaboration from the women before he finally made the mistake of exposing himself to a policewoman. Out of an estimated 25 to 30 exposures, he was reported only on three occasions

Under most circumstances, however, the offender is reported Although exhibitionists constitute the largest group of those apprehended by the police for sexual offenses, the

actual dynamics involved are far from clear Perhaps it will be of help in understanding the dynamics if we start by outlining briefly several aspects of exhibitionism

a) Over 99 per cent of preadolescent boys who engage in sex play, either of a homosexual or heterosexual nature, begin with the exhibition of the genitalia (Kinsey[68]).

b) Most exhibitionists seem to feel strongly that masturbation is sinful and evil and do not usually experience any pleasure from masturbation unless it is performed as part of genital exhibition (Hirning[59])

c) The individual often struggles against the impulse to expose himself in much the same way that the adolescent struggles against masturbatory impulses However, as the sexual tension rises he feels compelled to carry out his exhibitionistic activities And as in the case of masturbation, he often feels guilty and remorseful afterwards, particularly if he has achieved ejaculation

d) The suspense, excitement, and apprehension surrounding the exhibition of the genitals often intensify or reinforce its sexually stimulating aspects. In this connection it is interesting to note that the only type of sexual crime which increases when the papers are playing up a "sex crime wave" is indecent exposure (Hirning[59]).

e) Signs of being impressed or of emotional shock on the part of his victim are eagerly looked for by the exhibitionist. When the woman ignores his activities he is usually disappointed and abashed. But since many women react with disgust and obvious emotional shock, the exhibitionist is not usually disappointed.

f) The typical exhibitionist is apparently a quiet, submissive, "nice" individual with strong feelings of inadequacy, inferiority, and insecurity in personal relations (Apfelberg[8], Hirning[59, 60]) He comes from a strict home environment, has adopted puritanical attitudes toward sex, and is often overly attached to a domineering, protective mother

g) Although statistics indicate that approximately one half of the exhibitionists are married, they usually fail to achieve satisfactory sexual relations with their wives Many state that they married only because of family pressure, many have married at a relatively late age (Hirning[59])

There are apparently three major dynamic factors underlying exhibitionism First, in many cases the exhibitionism seems to represent an immature approach to the opposite sex based upon inadequate information, puritanical attitudes toward masturbation and sexual relations, marked feelings of shyness and inferiority, and often overattachment to the mother

A high-school teacher had exhibited himself for several months to a 30-year-old woman who lived next door She finally reported him, and before arresting him the police took motion pictures of his activities from the woman's apartment In order to get clearer pictures they raised the window At this point the teacher thought he had finally made an impression and in turn raised his own window and intensified his masturbatory activities and suggestive gestures

After his arrest he revealed a background of overattachment to a domineering mother and an inhibited puritanical attitude toward sex. He had rarely gone out with girls and felt extremely shy and insecure in his approach to them His strong bond to his mother undoubtedly contributed to his difficulties in heterosexual adjustment, making even his fantasies of sexual relations with other women seem like acts of unfaithfulness toward his mother Yet his strong attitudes against masturbation gave him no adequate outlet for the discharge of his sexual tensions As a result, he apparently blundered into the awkward, immature, and socially unacceptable form of sexual behavior

This point is summarized by Karpman[62]

"The exhibitionist, therefore, insofar as this particular activity is concerned, is an infantile individual Otherwise, of course, he may be well educated, capable, efficient, and even highly

moral, but with respect to this particular abnormality he is a child and is under the influence of wishes, impressions and emotional reactions which had their origin in his childhood" (p 214)

Closely related to this background of immaturity and overattachment to the mother (exaggerated oedipal situation) is the second major dynamic factor castration anxiety As a result of his strong female identification (with his mother), and together with the common fears and scruples about masturbatory activities, the exhibitionist has a strong need to demonstrate his masculinity and potency Many patients readily express ideas of this sort Apfelberg[3], for example, cites the case of a patient who received sexual satisfaction only when he accompanied the exhibition of his genitals with a question to his victim as to whether she had ever seen such a large penis On one occasion the woman, instead of evidencing shock and embarrassment, looked at him scornfully and assured him that she had On this occasion the defendant stated that he received no sexual gratification Such common expressions as "making her sit up and take notice" bear witness to the importance of "masculinity" and "potency" in exhibitionism Fenichel[38] summarizes this point in his statement that "In reassuring the individual against castration . exhibitionism may engage all of the sexual energy"

According to Fenichel, the relationship of castration fears to exhibitionism causes these activities to have a different development in each sex The man may quiet castration fears and assure himself of his potency by exhibiting his genitals But since women have no penis and, according to psychoanalytic theory, are presumed to feel castrated, genital exhibitionistic tendencies would naturally be inhibited and tend to a displacement of exhibitionism to the other bodily parts, such as the breasts That such attitudes are learned is obvious, of course, from the fact that little girls are just as prone to exhibit their genitals as little boys (Karpman[62]).

In addition to expressing immaturity or castration anxiety, or both, exhibitionism may also be only a part of more serious psychopathology For example, Henninger[57] found in an analysis of 51 cases of indecent exposure that eight were psychotic, ten mentally deficient, four chronic alcoholics, three psychopathic (antisocial) personalities, only nineteen could be classified under the heading of emotional immaturity. Similarly, Arieff and Rotman[5], in an analysis of 100 offenders, found mental deficiency, alcoholism, and various psychotic reactions—particularly schizophrenia—to be important etiological conditions It would appear here that conditions which lower restraints or weaken the individual's repressive forces or lead to personality regression, may eventuate in open exhibitionistic activities in predisposed personalities—i e, personalities with conflicts centering around castration anxiety

In very occasional cases another factor—hostility—enters in Here the exhibitionistic activity appears to afford an outlet for the hostile impulses toward members of the opposite sex or toward society in general Instead of fire-setting, stealing, or other antisocial acts, the individual exhibits himself as a retaliation against rejections and frustrations which he attributes to others In such cases the exhibitionism may be accompanied by aggressive acts, and the victim may be knocked down or otherwise attacked Kaufman[65] cites the case of a man who exposed himself in a subway to a 19-year-old girl and then "bumped into her" But this is rare, ordinarily, as we have pointed out, the behavior is limited to the exposure of the genitalia, so that exhibitionists are not usually the dangerous psychopaths that many newspaper stories make them out to be They usually respond well to psychotherapy designed to help them achieve more mature heterosexual adjustments Punishment is useless and harmful.

11. Voyeurism, scotophilia, and **inspectionalism** are synonymous terms referring to the achievement of sexual pleasure through clan-

destine peeping Although children often engage in such behavior, it occurs as a sexual offense primarily among young males These "peeping Toms," as they are commonly called, usually concentrate on females who are undressing or on couples engaging in sexual relations Frequently they masturbate during the course of their peeping activities.

How do they develop this pattern? In the first place, viewing the body of a female seems to be quite generally sexually stimulating, as evidenced by the popularity of pictures and drawings of nude or seminude women, and of burlesque shows, follies, and related types of entertainment The common saying "he feasted his eyes upon her" or "he raped her with his eyes" further attest to the "sexualization" of mere "looking" under various conditions. In the second place, the hush-hush and mystery which surround sexual activities lead to considerable curiosity about them on the part of young people Even adults are often interested in looking at the pornographic pictures and movies depicting sexual relations of various types that somehow turn up at many stag parties

If a youth feels shy and inadequate in his relations with the other sex, and has a good deal of curiosity concerning sexual activities, it is not too surprising if he accepts the partial goal of peeping. In this way he satisfies his curiosity and to some extent meets his sexual needs without the trauma of actually approaching the opposite sex, and thus without the failure and lowered self-status which such an approach might involve As a matter of fact, peeping activities often provide important compensatory feelings of power and superiority over the one being looked at which may contribute materially to the maintenance of this pattern. Also, of course, the suspense and danger associated with the conditions of peeping may lead to marked emotional excitement and a reinforcement of the sexual stimulation. In short, the peeper's feelings of inadequacy and fear in relation to the opposite sex, together with his curiosity and need for sexual expression, lead him into this deviant behavior, whereas a more mature male would satisfy his curiosity and sexual needs more directly through petting or actual sexual relations

Where older and sometimes married men engage in such peeping activities, the dynamics are quite similar, although the fantasy identification of the peeper with one or the other of the sexual partners may be quite important Here we sometimes find older women as well as men being involved. In such instances the peeper is rarely well adjusted sexually in his marital life.

A young married college student had an attic apartment which was extremely hot during the summer months To enable him to attend school, his wife worked and came home at night tired and irritable and not in any mood for sexual relations. In addition, "the damned springs in the bed squeaked" In order "to obtain some sexual gratification" the patient would peer through his binoculars at the room next door and occasionally saw the young couple there engaged in erotic scenes This stimulated the patient greatly and he thereupon decided to extend his activities to a sorority house However, during his second venture he was reported and apprehended by the police This offender was quite immature for his age, rather puritanical in his attitude toward masturbation, and prone to rich but immature sexual fantasies

Although a peeper observing the behavior of courting couples may become somewhat reckless in his secret pleasures and so may be detected and assaulted by his victims, such activity does not ordinarily have any serious criminal or unalterable antisocial aspects. In fact, many people probably have rather strong inclinations in the same direction which are well checked by practical considerations and moral attitudes Such immature behavior can usually be remedied by short-term psychotherapy without any serious consequences to the community Occasionally, however, more serious consequences result from voyeuristic

activities. For example, East[34] cites the case of a middle-aged man who, after his wife died, induced his grown daughter to bring men home for immoral purposes so that he could watch the incidents which took place between them. Apparently this represented a regression to certain childhood tendencies which had been repressed or suppressed up until this time but which were released after the death of his wife In other extreme instances we find well-developed voyeuristic patterns, in which the individual habitually frequents houses of prostitution where peepholes are provided These cases are very difficult to correct

12. Fetishism typically involves the centering of sexual interest on some bodily part or upon an inanimate object, such as an article of clothing The range of fetishistic objects includes breasts, hair, ears, hands, underclothing, shoes, handkerchiefs, perfume, stockings, and similar objects relating to the opposite sex. The mode of using these articles for the achievement of sexual excitation and gratification varies considerably but commonly involves kissing, licking, fondling, tasting, or smelling the fetishistic object

In order to obtain the required article, the fetishist may commit burglary, theft, or even assault. East[34] related the case of a hair fetishist who went up to a little girl on the street and cut off some of her hair He was later arrested with the scissors and hair in his possession At his residence five plaits of hair of different colors as well as 72 hair ribbons were found

Probably the most commonly stolen articles are women's underthings, which are taken from clotheslines and department-store counters. One young boy had accumulated over a hundred pairs of panties from a lingerie shop before he was finally apprehended. In such cases the excitement and suspense of the criminal act itself typically reinforce the sexual stimulation, and in some cases actually constitute the fetish, with the article stolen being of little importance For example, one youth admitted entering over 500 homes in which the actual entering usually sufficed for sexual purposes including actual orgasm. When this failed to produce satisfaction, he took some "token" such as money, bonds, jewelry, or even sofa cushions (Kennedy *et al*[66]). Fetishism is apparently the basis for many cases of so-called kleptomania

The term *kleptomania* refers to compulsive stealing, usually of objects for which the individual has no material use, but which are typically associated with sexual gratification The individual may steal a wide range of articles but commonly takes the more intimate items of women's wearing apparel, particularly panties and brassieres In some cases the stolen objects are accumulated in a sort of collection; in others, the patient throws them away shortly after the act is completed

The most common cases of kleptomania seem to involve various habitual forms of shoplifting by women and young boys and the stealing of wearing apparel from the clotheslines of sorority houses and other women's establishments As in other forms of fetishistic behavior, the excitement and suspense involved in stealing the fetishistic object contributes materially to the sexual excitation

When finally apprehended, these individuals are usually quite penitent and embarrassed about their behavior and are often prone to deny even to themselves its sexual connotations However, they admit that they seem unable to help themselves—that something forces them to perform the act Where psychiatric treatment is undertaken, such cases can usually be cleared up quite rapidly but unfortunately such treatment is often unavailable.

Not infrequently, fetishistic behavior consists of masturbation in association with the fetishistic object Here of course it is difficult to draw a line between fetishistic activities proper, and the use of pictures and other articles associated with a desired sexual object to increase the sexual excitation and satisfaction of masturbation Utilization of such ar-

ticles in masturbation is quite common and is not considered to be a serious deviation However, where sexual gratification can take place adequately only in this way, we are probably justified in referring to the practice as fetishistic. For example, one 19-year-old youth could achieve sexual satisfaction only by entering a strange woman's bedroom and masturbating in connection with the wearing apparel and particularly the odors present Bergler[13] cites an unusual case in which the individual's sex life was almost completely absorbed by a fetishistic fascination for exhaust pipes of cars Nor would just any exhaust pipe do; it had to be in perfect shape, that is to say, undented and undamaged, and it had to emit softly blowing gases This fetishistic object became far more attractive to the patient than sexual behavior associated with females.

In approaching the dynamics of fetishism, it is of value to note that slight degrees of fetishism are frequently encountered in everyday life. Most men are perhaps stimulated somewhat by more intimate articles of women's underclothing, and by perfumes and odors associated with women Bobby-soxers have sometimes actually torn the clothing of a movie or radio idol in order to possess some object intimately associated with him Masserman[86] states that in 1840 Jenny Lind was so popular that a New York promoter made a small fortune by permitting people to kiss a glove she had worn during a concert tour The standard fee was 25 cents for kissing the outside of the glove and 50 cents for kissing the inside And where an individual is cut off from normal heterosexual relations, as in prison or army life, it is quite understandable that an exaggerated value should often be placed on some sex object such as a pin-up picture, a lock of hair, or perfumed letters.

Many individuals are attracted sexually only by persons of a particular body build. Early childhood and adolescent crushes frequently lead to the association of certain traits of the desired person (such as red hair, or dimples, or long fingernails) with physical attraction, and in later life the individual may find himself sexually attracted to individuals possessing these same physical characteristics without realizing the specific basis for his attraction

All these associations might seem mysterious if it were not for the fact that, as we have seen, in the process of sexual development almost any object or act may become associated with sexual excitation and satisfaction. In fetishism the first prerequisite seems to be a conditioning experience in which a particular object or bodily part comes to be associated with sexual excitation Such associations will become the preferred patterns of sexual gratification only if they are part of a larger picture of maladjustment This typically includes what we may consider the second major ingredient in fetishism—fear of rejection and humiliation by members of the opposite sex As in exhibitionism, we are apparently dealing with an immature pattern involving feelings of inadequacy and fear in relation to the opposite sex, often intermixed with some measure of castration anxiety By his fetishistic practices the individual safeguards himself and also compensates somewhat for his feelings of inadequacy by mastery over the inanimate object, which comes to symbolize the desired sexual object and often becomes a substitute for it

One additional fetishistic pattern which merits special consideration is that associated with fire-setting *Pyromania* or compulsive fire setting is frequently related to aberrant sexual behavior It is interesting to note in this respect that "fire" and "passion" are often associated in popular songs and fiction in such statements as "you set me on fire" and so on Typically the dynamics here involve some strong early emotional association with fire which was sexually stimulating plus the usual fear and inadequacy in approaching members of the opposite sex, leading to deviate channels of sexual discharge A pyromaniac usually starts all his fires in the same way and feels forced to watch while the fire

rages—at least for an initial period This is accompanied by sexual excitation and orgasm, and is often followed by feelings of guilt One youth was so helpful in putting out a major blaze that a deputy fire chief personally thanked him for his efforts About a week later, at another serious conflagration, he was found again rendering major assistance Questioning revealed that he had started both fires, and that in watching them burn he achieved full sexual gratification He then felt extremely guilty and pitched in wholeheartedly to help put out the fire Again, the excitement and suspense may add materially to the sexual stimulation One apprehended arsonist who had set over 19 fires involving damage estimated at more than $2,000,000 stated that "It was the crowds more than the fires—those thousands of people I can't explain it, but I got a tremendous bang out of it, like at a prizefight or bullfight"

13. Necrophilia involves sexual excitation and gratification through viewing or actually having sexual relations with a female corpse Although it has been recognized as a sexual perversion since antiquity, it is of relatively rare occurrence and is ordinarily associated with severe psychopathology For the individual who has reason to pursue this subject, detailed case histories of necrophiliacs are cited by Brill[18] and Rapoport[101]

14. Sadism is a term derived from the name of the Marquis de Sade (1740-1814), who, for sexual purposes, inflicted such inhuman cruelty on his victims that he was eventually committed as insane Although the term has been broadened in its meaning so that it includes cruelty in general, we shall restrict our use of it to the achievement of sexual gratification through the infliction of pain upon the sexual partner The means of inflicting pain may be physical in nature, as in whipping, biting, pinching, or it may be verbal, in terms of humiliating remarks or criticism in front of others.

Sadistic sexual behavior ordinarily occurs on the part of the male It may vary in intensity from mild fantasy, through pinching or whipping, to serious mutilation or even murder In some cases the sadistic activities lead up to or terminate in actual sexual relations; in other cases full sexual gratification is obtained from the sadistic practice itself A sadist may slash a girl with a razor, or stick her with a needle, experiencing an orgasm during the process A case showing the peculiar and extreme associations which may occur in sadistic behavior is that of a young man who entered a strange girl's apartment, forcefully held a chloroformed rag to her face until she lost consciousness, and then branded her on the thigh with a hot iron She was not molested in any other way

Sometimes sadistic activities are associated with fetishistic objects East[34] cites a case who committed burglary in order to obtain possession of women's shoes, which he then slashed savagely with a knife After being sent to prison he was found cutting the throats of women in the photographs which other prisoners kept in their cells, and he admitted that he derived full sexual gratification from this procedure. Below is a more serious case of sadistic sexual murder

" a 35 year old sexual psychopath who, under sadistic impulses, and partly under the influence of liquor, murdered his wife in 1933, and two casually-met women in 1935 and 1940 respectively, and mutilated their bodies

"In childhood he gravitated toward the company of more or less delinquent boys; and at 13 was himself committed to the Essex County Training School in Mass, where he remained about two years At 17 he joined the army, where a duty sergeant, 'who was a wolf,' pursued him for sexual purposes as he was 'young and pink cheeked' For this reason, according to his account, he deserted after about four months

"For many years he would experience, several times a year, a vague impulse to commit some violent act, especially on a woman The danger of yielding to it seemed to him to be greatest when he was alone Accordingly, he would seek

immediately to place himself in the company of other men He denied any homosexual leanings His principal occupation has been that of a sailor He stated that when other sailors, on reaching port, would go in quest of women, he would join only drinking groups

"At twenty years he went to live with a young woman, and within three years, had two boys by her, finally married her, at the insistence of her parents There was, however, constant maladjustment between them with repeated separations One night in 1933 about midnight, he visited his wife They had a quarrel, he choked her to death and then mutilated her body by opening her abdomen to determine whether she was pregnant, as she had claimed

"He then shipped as a seaman and eventually, in the early part of 1935, arrived in San Francisco On April 5, 1935, in the evening, he met Lena C They engaged a room in a nearby hotel, sat around for about an hour, when he grabbed her by the throat, strangled her to death, and then mutilated her body by cutting off one of the breasts.

"He then shipped out of San Francisco, but returned about five years later, and on June 24, 1940, met Irene C in a beer hall They had a number of drinks together and both were fairly intoxicated He bought a bottle of whiskey and they went to a nearby hotel and engaged a room The woman immediately undressed and went to bed He did the same and found that she had 'passed out' He tried to arouse her but she did not wake up He grabbed her by the throat and choked her to death He then mutilated her body by cutting out the vaginal tract, washed himself, and left the hotel

"He had not had sexual intercourse with any of his victims, although he stated that he had gone with them each time for that purpose. . . . (Rosanoff[104], p 493)

Various attempts have been made to explain the dynamics in sexual sadism Among the more important factors which have been emphasized are

a) Sexual sadism as merely one expression of a more general destructive and sadistic attitude toward others. Here the individual feels frustrated and rejected by others and seeks through hostile, destructive behavior to achieve compensatory feelings of power and importance, and at the same time retaliation against the world for his mistreatment. Such individuals usually express their hate and sadistic tendencies in many other areas in addition to the sexual For example, they may be cruel to parents, to all persons over whom they have any power, and to animals

b) Sadistic behavior associated with intense attitudes toward sex as sinful and degrading In this case the individual achieves little or no satisfaction from masturbation or normal heterosexual relations, but finds pleasurable sexual stimulation in sadistic activities, which in a sense protect him from the full sexual implications of his behavior and at the same time express his contempt and punishment of the other person for engaging in sexual behavior.

c) Sadistic behavior growing out of early experiences in which sexual excitation is associated with the infliction of pain As we have noted, almost any object, act, or emotional condition may be associated with sexual excitation Such associations may occur under a variety of conditions In early sexual development, many children visualize a violent attack of a man upon a woman in their sexual fantasies Such ideas are strengthened by stories, newspaper articles of sadistic assaults on females, and many everyday experiences in which the infliction of pain on an animal or other person gives rise to strong emotions and unintentionally to sexual excitation We have noted this connection between sexual stimulation and strong emotional situations in general, especially during the adolescent period.

But such patterns may lose their potency after a time, with the result that the individual may either give them up or be forced to resort to increasingly extreme sadistic practices in order to achieve sexual gratification. However,

in some cases the sadistic behavior pattern becomes stabilized by means of various stereotyped rituals which must be carefully followed if the individual is to achieve satisfaction

d) Sadistic behavior growing out of castration anxiety. Sometimes the individual may be trying to bolster lagging or inferior sexual potency, actual or feared Many sadists are timid, feminine, undersexed individuals whose sadistic sexual behavior is apparently designed to arouse strong emotions in the sex object, which in turn arouse the sadist to a greater pitch of sexual excitement, thus making orgasm possible The sadist receives little or no satisfaction if his victim remains passive and unresponsive to the painful stimuli In fact, he quite frequently desires that the victim shall feel the pain as exciting and pleasurable and insists that his victim act pleasurably aroused even when being stuck with pins or otherwise hurt In sadism based on castration anxiety even the killing of the sexual partner would not result from the sadist's desire to cause pain and death, but from his desire to shed blood, which is presumably a powerful emotional stimulant. In fact, the wound is usually in those parts of the body, like the neck or abdomen, where a maximum of bleeding will occur In addition, sexual stimulation is enhanced by the suspense and excitement of sadistic behavior This is true even in more minor sadistic acts such as sticking a strange woman with a needle and then fleeing

Closely tied in with castration anxiety are general feelings of inadequacy and fears of failure in approaching the opposite sex Such a failure would result in humiliation and further self-devaluation, and so, in order to protect his self-esteem and adequacy, the sadist presumably engages in the infliction of pain as a "safe" means of achieving sexual stimulation and gratification. As Fenichel[38] puts it, the sadist feels, "I am the castrator, not the castrated one" It is as though the sexual object were to be delivered over incapable of resistance into his power. Here, of course, the individual gains strong compensatory feelings of power and superiority over the victim

e) Sadistic sexual behavior as part of a larger picture of psychopathology In schizophrenia, manic reactions, and other severe forms of psychopathology, sadistic sexual behavior and sadistic rituals may occur in psychologically predisposed persons as a result of the deviation of symbolic processes and the lowering of normal behavior restraints already discussed Similarly, in certain types of antisocial personality where sexual excitement and the infliction of pain have become associated, the lack of inhibition and moral restraint typical of the antisocial personality may involve the individual in serious sadistic patterns

It should be noted here, however, that rapists sometimes kill the only witness to the crimes, or criminals sometimes kill others in overcoming resistance or effecting their escape, and then mutilate the bodies in such a way as to make it appear that it is the work of a sadist or insane person. East[34], for example, cites the case of a robber who murdered three prostitutes and then mutilated their bodies in such a way as to suggest that they were the victims of a sadist or insane person rather than a robber

East well summarizes the general characteristics of sadistic sexual behavior in his statement that·

"Sadism may be attributable to an early sex experience it may be expressed early or late in life, it may be practiced upon inanimate objects with full effects, and upon animals or a person of the same or opposite sex, it may vary in intensity from mild phantasy to savage murder, it may be accompanied by a stereotyped ritual, it may be expressed at different times in the same manner by the same person; it may be used as a sexual stimulant in cases of sexual inferiority, it is usually more pleasurable to the sadist than normal sexual intercourse, which is generally of secondary importance, but it may be used as an occasional alternative, it may be

controlled or uncontrolled, and, when associated with mental diseases uncontrollable The sadist may be sexually inferior, he may have masochistic tendencies, he may be homosexual, heterosexual or bisexual; his victims are usually fortuitous and may be of widely different ages, the degree of violence used may depend upon the delay which occurs before full sexual satisfaction is reached, that is, the greater the delay the greater the violence, the greater the violence used the more likely is the act to be associated with gross mental abnormality." (East[84], pp 656-657)

15. In **masochism** the individual attains sexual pleasure through having pain inflicted on himself The term is derived from the name of the Austrian novelist, Leopold V Sacher-Masoch (1836-1895), whose fictional characters dwelt lovingly on the sexual pleasure of pain As in the case of sadism, the term *masochism* has been broadened beyond the field of sex to include pleasure derived from self-denial, from expiatory physical suffering such as that of religious flagellants, and from hardship and suffering in general However, for our immediate purposes we shall restrict our discussion to the sexual aspects of masochistic behavior

Masochistic activities may be confined to fantasies of ill treatment which are sexually stimulating or they may involve a wide range of pain-inflicting activities such as binding, trampling, semi-strangulation, spanking, switching, sticking with pins, and verbal abuse East[84] cites the case of a young woman who frequently cut herself about the arms, legs, and breasts, and inserted pins and needles under her skin She felt relieved and experienced actual sexual pleasure from the pain and from seeing the blood from the incisions Masochistic behavior is more common among women than men This is presumably due to the fact that a certain degree of sexual submissiveness related to suffering is more characteristic of the female than of the male in our culture

The dynamic factors underlying masochistic sexual behavior are essentially similar to those involved in sadistic sexual practices except that now the pattern involves the infliction of pain on the self instead of on others. Four patterns have been delineated·

a) Sexual masochism as one expression of a more general masochistic attitude toward life Here the individual has presumably met overwhelming life frustrations by submerging himself in an orgy of misery and self-degradation which seemingly takes the sting out of specific life reverses This may actually yield considerable satisfaction, based on our Christian belief in the virtues of suffering as a means of atonement and spiritual uplift. Often feelings of great self-righteousness and strength become associated with suffering and self-sacrifice

Masochistic patterns are especially likely to occur where the individual has developed attitudes of shame, disgust, and guilt toward sexual behavior In such instances the masochists apparently pay a penalty of suffering which then makes the experiencing of sexual pleasure permissible That is, masochists pay the price before rather than after their guilt-ridden behavior Here, of course, the masochist does not necessarily wish to suffer cruelty but merely to pave the way for sexual pleasure

b) Masochistic behavior growing out of early incidents in which the experiencing of pain is associated with sexual excitation and pleasure, such as strong emotional situations, books, stories, and newspaper write-ups concerning masochistic behavior. In some instances mothers who have exaggerated the brutality and painfulness associated with their first sexual relations may deeply impress their daughters with the relation of pain to sexual pleasure. Subsequent experiences such as painful masturbation or defloration may serve to reinforce this early association.

Kraines[73] cites the case of a 27-year-old-male that illustrates early association of pain and sexual pleasure This patient could not have

an orgasm unless he was beaten across the buttocks with a ruler When the pain reached great intensity, an orgasm followed. Analysis of the case revealed that as a boy the patient had a severe "crush" on a woman teacher On one occasion she punished him for some minor misdeed by placing him across her lap and spanking him with a ruler During this act the friction engendered by the teacher's knee against the genitals resulted in an orgasm. Kraines concluded that the patient's present masochistic desires were definitely traceable to this early incident

In other cases the associative pattern may be more complex and may involve fears of abandonment, neglect, or rejection Where children feel rejected by their parents, the only evidence of interest that they may get from the parents is when they are punished. Under such circumstances punishment may be looked upon as evidence of love and affection, and later, in sexual relations, the girl may figuratively offer to submit to being hurt by her sex partner in order to increase her erotic feelings and her feelings of being loved and wanted Persons with this background often tend to seek out sadistic individuals as marital partners, and clinical records indicate that they will undergo almost unbelievable pain and humiliation in order to assure themselves of their partner's love

Of course many young people undergo experiences in which pain and sexual pleasure are associated, but most of them outgrow such associations in the course of heterosexual development In the masochist the association is reinforced and becomes deeply established.

c) Masochism as a means of increasing sexual pleasure or reducing castration anxiety Masochistic sexual behavior on the part of women not infrequently represents an attempt to increase the emotional excitement of the sexual act and thus lead to maximal sexual satisfaction This dynamic is indicated in a general sense in our common sayings of wishing to be "crushed in his arms" or being "smothered with kisses." The erotic masochistic activities rarely result in severe injury to the subject, rather, they are in the nature of play-acting in which the abuse and pain are used as a source of forepleasure and building up of excitement through prohibited or deviant behavior Usually, of course, there is a background even here of early attitudes relating sexual pleasure with pain

According to psychoanalytic concepts, masochism might reduce castration anxiety either (1) because by complete subjugation and suffering the individual throws himself on the mercy and protection of others, or (2) because by complete subjugation and suffering he symbolically castrates himself, thus robbing others of the power to castrate him and alleviating his anxiety (Fenichel[38]).

d) Masochistic sexual behavior as a reaction formation to sadistic impulses Freud has emphasized masochism as sadism turned round on the self, and Reik[102] has taken a similar attitude in which he approaches masochism as if it were a reaction formation to sadistic impulses Presumably, learned ethical attitudes lead to the repression of sadistic impulses and to the formation of religious attitudes somewhat masochistic in nature

Such attitudes are then elaborated upon as a means of holding the repressed sadistic impulses in check. Thus the individual seems to crave situations in which he is hurt and humiliated and under certain conditions these attitudes carry over into the realm of sexual behavior However, at times the repression may fail and the masochist may sadistically slay or mutilate his sexual partner Although this clinical hypothesis may sound far-fetched, there are actual murders in which a long-standing masochistic pattern has suddenly given way to one of brutal murder Perhaps here the other person goes too far and arouses deep hostility which overwhelms the ego defenses, permitting free expression at last to the sadistic impulses

The following is an unusual case showing the development of a masochistic pattern and its close relation to sadism

"The patient is a thirty-nine-year-old lawyer. From early childhood, he has been obsessed by sexual ideas connected with the act of tickling. He remembers that once at the age of six or seven his older brother overpowered and tickled him. At the age of ten he read a short story which contained a detail dealing with titillation In this story a boy was lying ill in bed and was tickled by two men who were paid to do so. They tickled his soles until he was shaken with spasms of laughter and finally lost consciousness. This story made a deep impression on the boy. It provided him with a powerful stimulus for autoeroticism. He masturbated with the fantasy of a boy who was tickled by force, particularly on his bare soles. Whenever he played with young boys who were barefoot, he enjoyed tickling their soles He often gave money and other gifts to young boys to induce them to overpower and tickle other young boys. Watching them perform this act excited him immensely. The greater the resistance of the overpowered boy, the greater the satisfaction . .

"His conscious trend was at first apparently homosexual, but at the age of fourteen he read a poem about an evil nymph who caught a beautiful girl in the forest and, according to her custom, tickled her to death The poem was illustrated The picture of the girl's torture took possession of the patient's mind and his fantasies gradually began to show a more hetero-sexual-sadistic character . . .

"The patient's mother, a widow, owned a boarding house Once the patient heard one of the tenants, a young girl, ask the patient's mother to tell a young man that she wasn't home for him that evening, casually adding that he frequently annoyed her by tickling her The patient became very much excited Later, when the young man visited her again, the patient often spent hours listening at the girl's door He interpreted every spell of laughter and every exclamation as response to tickling, and enjoyed an intense sexual thrill at this occasion. . . .

"In his personal contact with girls, he was always cool and detached He avoided conversation about sexual topics and the idea of a physical (genital) contact was repulsive to him A few attempts at intercourse to which he was persuaded by friends ended with a complete failure. . . .

"Strange as it may seem, he succeeded in obtaining—for money—persons as partners and objects for his paraphilic enjoyment But this type of prostitute was so expensive that he could not afford them for any length of time Autoeroticism became therefore his only expedient. His fantasies varied The victim was often in the nude, invariably tied or made defenceless in some other way Sometimes he visualized himself tied or crucified, with girls or men tickling his soles

"When the patient was thirty-two years old, he met the woman who later became his wife She instinctively recognized the patient's paraphilia, for she started to talk to him about her own erogenous zones and gave him descriptions of tickling scenes which aroused him intensely. Following such conversation, he was able to perform a normal intercourse with her.

"A short time later he married her. She was very cooperative and permitted him to use her in various improvised sadomasochistic scenes connected with titillation. She satisfied his most abstruse desires in this respect His repulsion towards the woman's body gradually disappeared and a few years later a child was born

"As time progressed, the patient, to his dismay, noticed that tickling his wife excited him less and less Her vivid descriptions of her (fictitious) experiences with other partners began to grow duller and less effective In her desire to help her husband, she tried to arrange scenes at her home, to offer the patient a substitute gratification She invited friends to her house and then, in the course of the visit, without warning, she would start tickling them, while he was watching. Aroused, he would withdraw to the adjacent room and wait for her to join him in intercourse. During this period, this was the only way he could perform intercourse with his wife. Occasionally, the tickling scenes were arranged in a more elaborate way The servant girl would rush in 'jokingly' and tie the un-

suspecting visitor, then remove her shoes and stockings, so that the soles were exposed The patient would observe the scene from the adjoining room through an open door

"In the course of time all their friends stayed away It became more and more difficult to obtain proper objects for his paraphilic fantasies. He studied books of all nations and tried to ferret out references to his paraphilia. Whatever he found, he copied or pasted into a book which he called his 'Tickle Book.'

"If he could not find anything suitable, such as stories, pictures, etc., he used his own imagination and described in glowing colors typical paraphilic scenes He also recorded episodes told him by prostitutes For this purpose he composed a questionnaire of 60 questions which he submitted to these women. He also ordered from artists paintings and drawings portraying such scenes, thus his collection grew larger and larger and his report ends with the paraphilia apparently confirmed in him as continuing to require one form or another of specific gratification" (Gutheil[52], p. 87)

Summary. Apparently the sexual drive, in seeking outlet, will follow whatever pattern best suits the various considerations of practicality, previous experience and education, degree of maturity of the individual, moral restraints and attitudes of the individual and those around him, and so on If there is healthy personality development and normal opportunity, a heterosexual pattern will probably develop; if not, the individual may rely on masturbation or homosexual contacts or on one of the other "deviant" patterns, the particular one depending both on his personality and on the experiences and training he has had If masturbation is unacceptable to an individual, evidence indicates that he is more apt to adopt the more deviant patterns

Treatment and prevention of sexual deviations. The specific treatment in sexual deviations, of course, depends upon the particular type of sexual disturbance and the general personality organization of the patient. The treatment of frigidity in a fairly normal and stable individual is of course considerably different from the treatment of homosexuality or pedophilia. In general, however, the treatment of sexual offenders is essentially no different from the treatment of most other types of abnormal behavior. It typically includes increasing the patient's insight into his motivations and an emotional re-education to help him work out more acceptable channels of sexual discharge.

In addition to the problems connected with helping the sexual offender himself, there is also the problem of protecting society where the nature of the sexual disturbance requires such action Often this protection is achieved in the form of a long jail sentence, which in the case of certain deviations, such as exhibitionism and homosexuality, is usually useless and may even be actually harmful Of course in the case of more serious sexual offenses, such as sadism and pedophilia, society may have little choice but to remove the offender from society For there are no adequate treatment facilities for the rehabilitation of such offenders, and without adequate treatment they are likely to repeat their crimes or even worse ones. Considerable public and psychiatric interest has been devoted of late to the possibility of establishing hospitals for treatment of sexual disorders *

Of course, as in other abnormal behavior, the prevention of sexual deviations is of vital importance. It is apparent from our pre-

* The New York State Legislature has recently passed a bill permitting imprisonment for life of dangerous sex criminals, following a careful study of 102 sex offenders at Sing Sing Prison All were found to be suffering from some emotional or mental disorder which, although not severe enough to fit the legal definition of insanity, would make almost certain a repetition of their crimes if they were released after some routine period of incarceration, without therapy As more research is carried out and as more treatment facilities are made available, it is hoped that sex offenders, as well as other types of criminals, may be released (on parole or probation) only if and when the therapy has made them ready to be useful, responsible citizens, length of prison term thus would actually be set by the personality growth of the prisoner, rather than mechanically by the type and severity of his crime

ceding discussion of sexual deviates that the majority of them lack adequate information pertaining to sexual matters and have very little understanding of the importance and desirability of normal sexual patterns in marital relationships Usually their education is confined to vivid ideas of sinfulness and guilt which tend to make masturbation an unacceptable outlet for sexual tensions while at the same time blocking normal heterosexual development and contacts The result is, of course, a tendency to the deviate discharge of sexual tensions in undesirable behavioral patterns Fortunately, society is beginning to realize the importance of proper education and preparation for a healthy marital sexual adjustment, and many of our schools have introduced courses specifically designed to meet the emotional needs of adolescents Eventually these should do much to alleviate the present social problem of sexual deviations

The following case is one in which inadequate and distorted sexual information played a major role. It shows a progression of deviate behavior from relatively minor fetishistic patterns to sadistic murder, vividly illustrating the need for careful vigilance and early correction of deviations

During 1945 and 1946, the city of Chicago was the scene of 3 sadistic murders which occurred with no evidence of monetary or other clear-cut motivation. On the wall of one apartment, in which an ex-Wave was brutally killed, there appeared in lipstick "For heaven's sake catch me before I kill more I cannot control myself" In another killing, a child of six was kidnapped and her body dismembered and thrown into various sewers and drains The kidnaper wrote and delivered a ransom note to the child's parents No progress was made in this case, until, on June 26, 1946, a policeman off duty captured a young man who was trying to make a getaway after an attempt at burglary The boy would probably have been released on probation had it not been for an alert police official who noticed a resemblance between a curve flourish in the boy's signature and the ransom note. This boy, a 17-year-old university student, proved to be the perpetrator of these crimes

The events leading up to these shocking murders by this youth have been carefully studied by psychiatrists and psychologists and the following points from the clinical report on this case are of considerable value in showing the dynamics in sexual sadism as well as in other sexual deviations The boy was found to be of normal intelligence, not psychotic, and medically normal, including electroencephalographic tracings.

"When aged 9, the patient began to be interested in 'the feeling and color' and then 'the stealing' of women's underclothing He began to take these at first from clothes lines, then from basements, and later from strange houses, the doors of which he found open or ajar Dresses or other articles of woman's apparel made no appeal to him nor was he interested in the undergarments of his immediate family Having secured a pair of woman's panties or drawers, he would take it to a basement or home, put it on, experience excitement and sexual completion Most garments he then threw away, some he replaced, and some he hoarded

"When 12 or 13 years of age, he secured the desired garments by going into houses through windows This furnished more excitement After three such expeditions, he took objects ('guns or money') other than underclothes, a change which was again an added stimulation. 'It seemed sort of foolish to break in and not take anything' When he had thus changed his objective, the interest in underclothes largely evaporated and was replaced by the excitement experienced on 'making an entrance' through the window Often he would struggle against his desire to leave his room at night, but when he did leave it was for the purpose of committing burglaries He had sexual excitement or an erection at the sight of an open window at the place to be burglarized Going through the window he had an emission"

Even after his later admission to the university, this deviate behavior continued, although it apparently became increasingly difficult to

achieve sexual gratification and it took several entrances to produce an emission. On one occasion he was startled in the act of burglarizing by a nurse whom he promptly struck and injured This resulted in an orgasm and he left without striking her again and returned to his room at the university On subsequent occasions when he was startled in the course of his burglarizing, he immediately killed In one instance he had an erection on entering the house and then "The dog barked and the lady started hollering She had on a night gown She jumped up and hollered Then I took the knife and stabbed her — through the throat—just to keep her quiet " Although this resulted in an orgasm he apparently had not intended to kill the woman "It was the noise that set me off, I believe I must have been in a high tension and the least bit of noise would disturb me in that manner."

"After an emission was the only time he felt he had done wrong [Then he suffered] from the pang of conscience This compelling 'urge' had clearly a dynamic sexual origin so we asked him had he never relieved this tension by manual manipulation. On one occasion he indignantly denied even the attempt . . Later he said he tried this method twice without success. In the same manner, he at first denied ever having attempted any sex play with girls Two days later with one of his rare shows of emotion he said, looking much ashamed, that twice, later correcting himself to eight times, he had touched girls 'on the breasts' and then pressed 'on the leg' Always, having done this, he would immediately burst into tears and 'be upset and unable to sleep' He forcibly denied ever having made any more intimate advances, except that he 'kissed them' sometimes. 'They wanted to kiss, I didn't'

"It was clear that normal sex stimulation and experience were unpleasant, indeed 'repulsive,' to him, and these efforts afterwards created in him a negative emotional state He found them improper in the conduct of others; he never spoke of them except in condemnation . . " (Adapted from Kennedy *et al*[66] Paragraphs in quotation marks are quoted verbatim)

OTHER PATHOLOGICAL TYPES

In addition to antisocial personality and sexual deviate reactions, the Army classification includes four other pathological personality types which may be considered as abortive stages in a neurosis or a psychosis and may show some of the characteristics of either or both of these disorders However, they are the product of deviant development rather than decompensation under stress and do not typically progress beyond the incipient stage These personality types are self-explanatory and for our purposes may be briefly outlined

1. **Schizoid personality.** This term is applied to individuals who react with unsociability, seclusiveness, serious-mindedness, nomadism, and often eccentricity This type is very similar to the latent type of schizophrenia discussed in Chapter 7

2. **Paranoid personality.** Here we see individuals with many of the traits of the schizoid personality, coupled with suspiciousness, envy and jealousy, stubbornness, a tendency to project the blame for their difficulties upon others but no actual delusions

3. **Cyclothymic personality.** This personality type is really an abortive or incipient stage of manic-depressive reactions It is characterized by frequently alternating moods of elation and sadness without adequate external cause Occasionally such persons are persistently euphoric or depressed without falsification or distortion of reality

4. **Inadequate personality.** Here we see educational, occupational, social, and emotional ineffectiveness Such persons may be normal or superior in intelligence and physically in good condition, but nevertheless show inadaptability, ineptness, poor judgment, and social incompatibility.

Treatment in these pathological types is usually difficult and must be continued over a long period of time if it is to be effective Since these individuals are not under the pressure of anxiety-producing conflicts which would lead them to want help, they rarely come for treatment of their own volition, and

hence do not usually receive psychotherapy Consequently, they usually maintain these borderline adjustments throughout their lifetime, although there is some evidence that these reactions tend to be ameliorated as the individual gets older.

REFERENCES

The reference list includes not only the sources from which the author has drawn material, but acknowledgments of the permissions granted by authors and publishers to quote directly from their works

1 Abrahamson, David "Motivation of Crime" *Journal of Nervous and Mental Disease,* CIII(1946), 549-570

2 Abrahamson, David "Psychodynamics in Criminal Behavior" *Journal of Nervous and Mental Disease,* CII(1945), 65-75.

3 Apfelberg, Benjamin, Sugar, Carl, and Pfeffer, Arnold Z. "A Psychiatric Study of 250 Sex Offenders" *American Journal of Psychiatry,* C(1944), 762-770

4. Arieff, Alex J and Bowie, Carol G "Some Psychiatric Aspects of Shoplifting" *Journal of Clinical Psychopathology,* VII(1947), 565-576

5 Arieff, Alex J and Rotman, D B "Psychiatric Inventory of One Hundred Cases of Indecent Exposure" *Archives of Neurology and Psychiatry,* XLVII(1942), 495-498

6 Backus, P L and McGill, C M "Investigation and Treatment of Enuresis in the Army" *British Medical Journal,* II(1944), 462-465

7 Balassa, Edith "Rehabilitation of Delinquent Girls" *American Journal of Psychotherapy,* I(1947), 329-337

8 Banay, Ralph S "Immaturity and Crime" *American Journal of Psychiatry,* C(1943), 170-177.

9 Banay, Ralph S "Wanted—An Institute of Criminal Science" *1945 Yearbook of the National Probation Association,* New York

10. Banay, Ralph S "Psychiatric Technique and Rehabilitation" *1942 Yearbook of the National Probation Association,* New York

11. Benowitz, Harold H. "The Enuretic Soldier in an AAF Basic Training Center" *Journal of Nervous and Mental Disease,* CIV(1946), 66-79 Reprinted by permission of Physicians Postgraduate Press

12 Berdie, Ralph F and Wallen, Richard "Some Psychological Aspects of Enuresis in Adult Males," *American Journal of Orthopsychiatry,* XV(1945), 153-159

13 Bergler, Edmund "Analysis of an Unusual Case of Fetishism" *Bulletin of the Menninger Clinic,* II(1947), 67-75

14 Bevans, Gladys H "Biting the Fingernails," *Woman's Day,* December 1945

15 Billig, A L "The Consistency of Finger-nail Biting" *Proceedings of the Pennsylvania Academy of Science,* XX(1946), 39-43

16. Bluemel, C S *War, Politics, and Insanity* Denver The World Press, 1948 Reprinted by permission of Dr Bluemel.

17 Bovet, L "L'Onychophagie Contribution à l'étude de la pathologie de la personne" *Schweizer Archiv fur Neurologie und Psychiatrie,* L(1942), 14-59

18 Brill, A A "Necrophilia" *Journal of Criminal Psychopathology,* II(1941), 51-73, 433

19 Caldwell, J M "The Constitutional Psychopathic State (Psychopathic Personality) I Studies of Soldiers in the U S Army" *Journal of Criminal Psychopathology,* III(1941), 171-179

20 Caldwell, J M. "Neurotic Components in Psychopathic Behavior" *Journal of Nervous and Mental Disease,* XCIX(1944), 134-148

21. Cassity, John H "Personality Study of 200 Murderers" *Journal of Criminal Psychopathology,* II(1941), 296-304

22 Cleckley, Hervey "The Psychopath: A Problem for Society" *Federal Probation,* XIX (1946), 22-25

23. Coleman, James C and McCalley, Jean E "Nail-biting Among College Students" *Journal of Abnormal and Social Psychology,* XLIII (1948), 517-525

24 Coleman, James C and McCalley, Jean E. "Nail-biting and Mental Health, a Survey of the Literature" *Mental Hygiene,* XXXII (1948), 428-454

25 Daniels, E M "An Analysis of the Relation Between Handedness and Stuttering with Special Reference to the Orton-Travis Theory of Cerebral Dominance" *Journal of Speech Disorders,* V(1940), 309-326

26. Darling, H F "Definition of Psychopathic Personality" *Journal of Nervous and Mental Disease,* CI(1945), 121-126

27 Davis, Katherine B *Factors in the Sex Life of Twenty-two Hundred Women* New York Harper, 1929

28 Despert, J Louise "Psychopathology of Stuttering" *American Journal of Psychiatry,* XCIX(1943), 881-885

29 Despert, J Louise "Psychosomatic Study of Fifty Stuttering Children" *American Journal of Orthopsychiatry,* XVI(1946), 100-133

30 Despert, J Louise "Stuttering A Clinical Study" *American Journal of Orthopsychiatry,* XIII(1943), 517-525

31 Deutschberger, Paul "The Psychosomatic Component in Problem Behavior" *American Journal of Orthopsychiatry,* XVI(1946), 147-155

32 Diethelm, O and Simons, D J "Electroencephalographic Findings in Psychopathic Personalities" *Journal of Nervous and Mental Diseases,* CII(1945), 611-614

33 Dishay, L J "The Challenge and Solution of Juvenile Delinquency" *Journal of Clinical Psychopathology and Psychotherapy,* VI(1944), 335-354

34 East, W Norwood "Sexual Offenders" *Journal of Nervous and Mental Disease,* CIII (1946), 626-666

35 Ellis, A "The Sexual Psychology of Human Hermaphrodites" *Psychosomatic Medicine,* VII(1945), 108-125

36 English, Oliver, and Pearson, G H J *Common Neuroses of Children and Adults* New York Norton, 1937.

37 Fenichel, Otto "The Psychopathology of Coughing" *Psychosomatic Medicine,* V(1943), 181-184

38 Fenichel, Otto *The Psychoanalytic Theory of Neurosis* New York Norton, 1945 London· Routledge and Kegan Paul, Ltd

39 Finger, Frank W "Sex Beliefs and Practices Among Male College Students" *Journal of Abnormal and Social Psychology,* XLII(1947), 57-67

40 Gibbs, Frederick A , Bagchi, B K , and Bloomberg, Wilfred "Electroencephalographic Study of Criminals" *American Journal of Psychiatry,* CII(1945), 294-298

41 Gilbert, G M *Nuremberg Diary* New York: Farrar, Strauss and Company, 1947

42 Goldfarb, W "Infant Rearing and Problem Behavior" *American Journal of Orthopsychiatry,* II(1943), 249-266

43 Goldman, George S and Bergman, Martin S "A Psychiatric and Rorschach Study of Adult Male Enuresis" *American Journal of Orthopsychiatry,* XV(1945), 160-166

44 Gray, M "The X Family A Clinical and Laboratory Study of a 'Stuttering' Family" *Journal of Speech Disorders,* V(1940), 343-348

45 Greco, M C and Wright, J C "The Correctional Institution in the Etiology of Chronic Homosexuality" *American Journal of Orthopsychiatry,* XIV(1944), 295-308

46 Green, E W and Johnson, L G "Homosexuality" *Journal of Criminal Psychopathology,* V(1944), 467-480

47 Greenacre, Phyllis "Conscience in the Psychopath" *American Journal of Orthopsychiatry,* XV(1945), 495-509

48 Greene, James S "Hope for the Stutterer" *Hygeia* (now called *Today's Health*), February 1946, pp 120-121

49 Greenspan, Herbert and Campbell, John D "The Homosexual as a Personality Type" *American Journal of Psychiatry,* CI(1945), 682-689

50 Grinker, R R , Willerman, B , Bradley, A D , and Fastovsky, A "A Study of Psychological Predisposition to the Development of Operational Fatigue II In Enlisted Personnel" *American Journal of Orthopsychiatry,* XVI (1946), 207-214

51 *Guidance Center of the Adult Authority* A pamphlet by the State of California Department of Corrections Also see "The Process of Reception in the California Prison System," by Norman Fenton Reprinted from *The Prison World,* September-October 1945

52 Gutheil, Emil A "A Rare Case of Sadomasochism." *American Journal of Psychotherapy,* I(1947), 87-92

53 Hahn, Eugene F *Stuttering Significant Theories and Therapies* Palo Alto Stanford University Press, 1943

54 Harris, Dale B "Delinquency in Adolescent Girls" *Mental Hygiene,* XXVIII(1944), 596-601

55 Heaver, W L "A Study of Forty Male Psychopathic Personalities Before, During and After Hospitalization" *American Journal of Psychiatry,* C(1943), 342-346

56 Heide, Carel Van Der and Weinberg, Jack "Sleep Paralysis and Combat Fatigue" *Psychosomatic Medicine,* VII(1945), 330-334

57 Henninger, James M "Exhibitionism" *Journal of Criminal Psychopathology,* II(1941), 357-366

58 Hill, J M "Nail-biting, Incidence, Allied Personality Traits and Military Significance" *American Journal of Psychiatry,* CIII(1946), 185-187

59 Hirning, L Clovis "Genital Exhibitionism, an Interpretive Study" *Journal of Clinical Psychopathology,* VIII(1947), 557-564

60 Hirning, L Clovis "Indecent Exposure and Other Sex Offenses" *Journal of Clinical Psychopathology and Psychotherapy,* VII(1945), 105-114

61 Hodge, R. S "The Impulsive Psychopath A Clinical and Electrophysiological Study" *Journal of Mental Sciences,* XCI(1945), 472-476

62. Karpman, Ben *Case Studies in the Psychopathology of Crime* (Vol II) Washington, D. C Medical Science Press, 1944

63 Karpman, Ben "Sex Life in Prison" *Journal of Criminal Law and Criminology,* XXXVIII (1948), 475-486

64 Karpman, Ben "The Psychopathology of Exhibitionism." *Journal of Clinical Psychopathology,* IX(1948), 179-225

65 Kaufman, S Harvard "Aggression in the Girl Delinquent" *American Journal of Orthopsychiatry,* XV(1945), 167-171

66 Kennedy, Foster, Hoffman, Harry R, and Haines, William H "A Study of William Heirens" *American Journal of Psychiatry,* CIV(1947), 113-121

67. Keschner, Moses "Scientific Proof and Relations of Law and Medicine Simulation of Nervous and Mental Disease" *Journal of Nervous and Mental Disease,* CIII(1946), 571-611

68 Kinsey, Alfred C, Pomeroy, Wardell, B, and Martin, Clyde E *Sexual Behavior in the Human Male* Philadelphia· Saunders, 1948

69 Knight, R P "Behavior Problems and Habit Disturbances in Pre-Adolescent Children· Their Meaning and Management" *Bulletin of the Menninger Clinic,* VIII(1945), 188-199

70 Knott, J R and Gottlieb, J S "Electroencephalogram in Psychopathic Personality." *Psychosomatic Medicine,* V(1943), 139-142

71 Koch, Richard A "Promiscuity as a Factor in the Spread of Venereal Disease" *Journal of Social Hygiene,* XXX(1944), 517-529

72 Kopp, H "The Relationship of Stuttering to Motor Disturbances" *Nervous Child,* II(1943), 107-116

73 Kraines, Samuel H *Therapy of the Neuroses and Psychoses* (3rd ed) Philadelphia Lea and Febiger, 1948

74 Langworthy, Orthello R and Betz, Barbara J "Narcolepsy as a Type of Response to Emotional Conflicts" *Psychosomatic Medicine,* VI(1944), 211-226

75 Levine, Alexander "Enuresis in the Navy" *American Journal of Psychiatry,* C(1943), 320-325

76 Lindner, R M "A Formation of the Psychopathic Personality" *Psychiatry,* VII(1944), 59-63

77 Lindner, R. M "Psychopathic Personality and the Concept of Homeostasis" *Journal of Clinical Psychopathology and Psychotherapy,* VI (1945), 517-521

78 Lindner, R M *Stone Walls and Men* New York Odyssey, 1946

79 Lion, Ernest G, Jambor, Helen M, Corrigan, Hazel G and Bradway, Katherine P. *An Experiment in the Psychiatric Treatment of Promiscuous Girls* San Francisco Department of Public Health, 1945

80 Lombroso, Cesare *Men of Genius* New York Walter Scott, 1891

81 Los Angeles *Times,* February 5, 1950, p 1

82 Louttit, Chauncey M *Clinical Psychology of Children's Behavior Problems* (rev ed) New York Harper, 1947

83 Lubin, A J "Recent Contributions to Neurology from War Experiences" *American Journal of Medical Science,* CCVII(1944), 114-129

84 Maas, Otto "On the Etiology of Stuttering" *Journal of Mental Science,* XCII(1946), 357-363

85 MacKinnon, Jane "The Homosexual Woman" *American Journal of Psychiatry,* CII (1947), 661-664

86 Masserman, Jules H *Principles of Dynamic Psychiatry* Philadelphia. Saunders, 1946

87. "Masquerading in Uniform A Wartime Form of Psychopathic Behavior" *Journal of Mental Science,* XCI(1945), 188-194

88 Menninger, K A "Recognizing and Renaming 'Psychopathic Personalities'" *Bulletin of the Menninger Clinic,* V(1941), 150-156

89. Menninger, K A "A Psychoanalytic Study of the Significance of Self-Mutilations" *Psychoanalytical Quarterly,* IV(1935), 408

90 Menninger, William C *Facts and Statistics of Significance for Psychiatry* The Hogg Foundation, University of Texas, 1948

91. *Mental Health in Corrective Institutions* Proceedings of the Seventy-First Annual Congress of the American Prison Association New York City, 1941

92 Meyer, B C "Psychosomatic Aspects of Stuttering" *Journal of Nervous and Mental Disease,* CI(1945), 127-157

93 Michaels, Joseph J "The Relationship of Anti-Social Traits to the Electroencephalogram in Children with Behavior Disorders" *Psychosomatic Medicine,* VII(1945), 41-44

94 Myerson, A and Neustadt, R "The Bisexuality of Man" *Journal of the Mt Sinai Hospital* New York IX(1942), 668-678

95 Olkon, David *Essentials of Neuropsychiatry.* Philadelphia Lea and Febiger, 1945

96 Pattie, Frank A "Why Does the Speech of Stutterers Improve in Chorus Reading?" *Journal of Abnormal and Social Psychology,* XXXIX(1944), 362-367

97 Pennington, L A "The Incidence of Nail-biting Among Adults" *American Journal of Psychiatry,* XII(1945), 241-244

98 Pennington, L. A and Mearin, R J "The Frequency and Significance of a Movement Mannerism for the Military Psychiatrist." *American Journal of Psychiatry,* C(1944), 628-632

99 Radzinowicz, L and Turner, J W C *Mental Abnormality and Crime* London Macmillan, Ltd, 1944

100 Ramsey, G V "The Sexual Development of Boys" *American Journal of Psychology,* LVI (1943), 217-231

101 Rapoport, J "A Case of Necrophilia" *Journal of Criminal Psychopathology,* IV(1942), 277-289

102 Reik, Theodore *Masochism in Modern Man* New York Farrar and Rinehart, 1941

103 Rickles, N K "Exhibitionism" *Journal of Nervous and Mental Disease,* XCV(1942), 11-17

104 Rosanoff, Aaron "Thirty Condemned Men" *American Journal of Psychiatry,* XCIX(1943), 484-495

105 Rottersman, W "The Selectee and His Complaints" *American Journal of Psychiatry,* CII (1946), 79-86

106 Rowe, A W and Lawrence, H C "The Male and Female Gonads." *Endocrinology,* XII (1928), 591-662

107 Ruskin, Samuel H "Analysis of Sex Offenses Among Male Psychiatric Patients" *American Journal of Psychiatry,* XCVII(1941), 955-968

108 Rymer, Charles A "The Insanity Plea in Murder" *American Journal of Psychiatry,* XCVIII (1941), 690-697

109 Schachter, M and Cotte, S "Etude analytique de 100 cas d'onychophagie chez l'enfant" *Annales Paediatrici,* CLXVI(1946), 99-106.

110 Selling, Lowell S "The Role of the Court Clinic in the Administration of Justice" *Journal of Clinical Psychopathology,* VII(1946), 357-375

111 Shahovitch, Gladys P "Don't Scold the Nail-biter" *Hygeia,* XXIII(1945), 302-304

112 Shodoff, Paul "Sleep Paralysis" *Journal of Nervous and Mental Disease,* C(1944)

113 Silverman, Daniel "The Psychotic Criminal A Study of 500 Cases" *Journal of Clinical Psychopathology,* VIII(1946), 301-327

114 Silverman, Daniel "The Electroencephalograph and Therapy of Criminal Psychopaths" *Journal of Criminal Psychopathology,* V(1944), 439-466

115 Simon, C. T. "Complexity and Breakdown in Speech Situations" *Journal of Speech Disorders,* X(1945), 199-203

116 Sloane, P and Karpinski, E "Effects of Incest Upon the Participants" *American Journal of Orthopsychiatry,* XII(1942), 666 674

117 Solomon, P "Narcolepsy in Negroes" *Diseases of the Nervous System,* VI(1945), 179-183

118 Sprague, G S "The Psychopathology of Psychopathic Personalities" *Bulletin of the New York Academy of Medicine,* XVII(1941), 911-921

119 Stirt, Sonia S "Overt Mass Masturbation in the Classroom" *American Journal of Orthopsychiatry,* X(1940), 801-804

120 Terman, Lewis M *Psychological Factors in Marital Happiness* New York McGraw-Hill, 1938

121 Thom, Douglas *Everyday Problems of the Everyday Child* New York Appleton-Century-Crofts, 1927

122 Thomas, P W "Character and the Psychopath" *Journal of Nervous and Mental Disease,* CII(1945), 449-453

123 Thorne, Frederick "The Incidence of Nocturnal Enuresis After Age Five" *American Journal of Psychiatry,* C(1944), 686-689

124 *Time,* November 11, 1946, p 26

125 *Time,* March 17, 1947, p 25

126 *Time,* February 10, 1947, p 72.

127. Travis, Lee E *Speech Pathology* New York D Appleton-Century, 1931

128 Wechsler, D "The Incidence and Significance of Fingernail-biting in Children" *Psychoanalytic Review,* XVIII(1931), 201-209

129 Wertham, Frederick *The Show of Violence* Garden City Doubleday, 1949

130 Whiles, W H "Psychopathology in the Treatment of Tics" *Medical Practice,* CCVI(1941), 356-359

131 Witschi, Emil and Mengert, William F "Endocrine Studies on Human Hermaphrodites and Their Bearing on the Interpretation of Homosexuality" *Journal of Clinical Endocrinology,* II(1942), 279-286 Summarized by permission of the authors and Charles C Thomas, Publisher

132 Zilboorg, Gregory "Historical Sidelights on the Problem of Delinquency" *American Journal of Psychiatry,* C(1944), 757-761

CHAPTER TEN

ALCOHOLISM AND DRUG ADDICTION



[illegible] Yale School of [illegible] Problem Drinkers

Our contemporary problems of alcoholism and drug addiction are not new in the history of mankind However, it has not been until recent years, with the direction of scientific attention to these problems, that they have come to be regarded as psychiatric disorders In the past both alcoholism and drug addiction were usually considered "moral problems" resulting from moral weakness and lack of will power. Consequently, little progress was made in understanding the underlying dynamic factors or in developing effective methods of treatment For exhortation and other approaches at treatment based on the theory of moral weakness proved singularly ineffective in bringing about any change in the behavior of ei[illegible]

Although there are still many aspects of both alcoholism and drug addiction that are not yet understood, their acceptance, investigation, and treatment as psychiatric problems have led to tremendous progress We realize now that they represent merely two more of the many possible maladjustive ways in which an individual may react to stresses, internal or external, that are too severe for him to handle in "normal" adjustive ways

ALCOHOLISM

References to the excessive use of alcohol are found in many of man's earliest printed records As we have previously noted, Cambyses, king of Persia in the sixth century B.C, has the dubious distinction of being one of the first alcoholics on record and he seems to have been psychotic as well Since his time, there have been many notable historical figures who have had their difficulties with the "demon rum."

INCIDENCE*

It has been estimated that there are approximately 56 million users of alcohol in the

* Statistics based on following sources Hirsh[16], Menninger[21], *Time* [41]

United States, the cost of their alcoholic consumption runs over 7 billion dollars per year Some 3 to 4 million of these users may be classified as "excessive drinkers." They vary from individuals who "go on a bender" occasionally to the more serious chronic alcoholics who cannot face life without alcohol Of these some 750,000 are confirmed alcoholics An estimated 13,000 men and women have alcoholic psychoses Alcoholics constitute about 10 per cent of the first admissions to mental hospitals although far less than half of these are psychotic It is with the chronic alcoholics that we are concerned in our present discussion.

The problem of alcoholism is not confined to any particular race or group of people but is found among peoples throughout the earth and on all socio-economic levels However, its incidence is far greater among certain peoples than among others People of Irish, English, and Scandinavian descent seem most prone to alcoholism, while Jews and Italians are least susceptible (Moros[24]). In the case of the Jews this is probably due to the existence of a powerful social tradition against the excessive use of alcohol (Myerson[25], Glad[11]).

Similar social factors apparently account for the higher number of male than female alcoholics in the United States Typical estimates place the ratio of female to male alcoholics at about 1 to 3 In Norway the ratio is apparently about 1 to 12, while in England it is about 1 to 2 (Rotman[35]) Undoubtedly these differences in sex ratios are based primarily on differing degrees of social acceptance of excessive drinking among women and men For example, in our society a woman who drinks excessively is much more likely to be socially condemned and ostracized than a man with similar drinking habits. However, our concepts in this respect are gradually being modified in the direction of greater equality of the sexes in such matters, and as we might expect, there is an accompanying increase in the number of females who drink excessively In fact, according to Seliger's[38] findings, the ratio of female to male alcoholics has risen alarmingly during the past twenty years until nearly one fifth of the women who are in jail in America are there because of drunkenness.

GENERAL EFFECTS OF ALCOHOL

Contrary to popular beliefs, alcohol is not a stimulant but a depressant, which attacks and numbs the higher brain centers, thus lowering their inhibiting control over the lower centers As behavioral restraints decline, more primitive emotional responses become manifest; the drinker may indulge in the satisfaction of impulses which he ordinarily holds in check Some degree of motor incoordination such as the slurring of speech soon becomes apparent In addition, alcohol dulls the drinker's sense of discrimination and his perception of cold, pain, and other discomforts He experiences a sense of warmth, expansiveness, and well-being In such a mood, unpleasant realities are screened out and the drinker's feelings of self-esteem and adequacy rise He may feel quite capable of undertaking a task such as driving a car, writing a book, or fighting a duel Drink provides an occasion for conviviality and sympathy, and engenders a false sense of ease and security Casual acquaintances become the "best and most understanding friends in the world," and the drinker enters a generally pleasant world of unreality in which his cares and worries are temporarily left behind him. Thus in the process of the release of the individual's inhibitions he is actually stimulated However, such stimulation is emotional only, intellectual and motor functions are impaired.

When the alcoholic content in the blood stream reaches 0 3 per cent, muscular coordination, speech, and vision become markedly disturbed, and thought processes become confused Next comes a stuporous condition, and finally when the alcoholic content in the blood stream reaches approximately 0 5 per cent, the whole neural balance is upset and the individual "passes out." Unconsciousness here apparently acts as a safety device, for more alcohol might well be lethal.

In general, it is the amount of alcohol actually concentrated in the bodily fluids, not how much liquor is drunk, which determines intoxication However, the effects of alcohol vary with the individual—his personality, his physical condition, the amount of food in his stomach, and the duration of the drinking. The attitude of the drinker is important, too although actual motor and intellectual abilities decline in direct ratio to the blood concentration of alcohol, many persons who consciously try can maintain adequate control over their behavior and evidence few outward signs of being intoxicated even after drinking relatively large amounts of alcohol. Despite such variations from one drinker to another, each usually reacts to alcoholic intoxication with a fairly consistent reaction pattern Some drinkers become sad and mournful and pour out their troubles, others become drowsy and may go to sleep, while still others become suspicious, irritable, or pugnacious. Probably the great majority of excessive drinkers become subjectively euphoric and experience a marked sense of well-being, sociability, and adequacy

The actual effect of alcohol upon the brain is not fully understood, but it does not seem to damage the tissue or cause injury by corrosion or irritation. Rather it seems to slow down the brain's functioning temporarily by a numbing or drugging action which progressively affects different parts of the brain—first the higher centers, involving judgment and inhibition, and later the centers that control motor coordination and the basic vegetative functions

Many writers have maintained that alcohol is a systemic poison which has detrimental effects on various bodily organs Actually, alcohol is a high-calorie food, which can be utilized by the body at the rate of some 5 to 10 grams per hour. Amounts in excess of this remain in the blood stream until they can be oxidized Some 10 per cent of the alcohol ingested is eliminated through the breath, urine, and perspiration; the rest is completely utilized, though it may take several hours or even days. Aside from cirrhosis of the liver, in which alcohol may play some role (it attacks about 8 per cent of alcoholics), alcohol does not in itself have a detrimental effect upon any of the various bodily organs It does not cause impotency or have a bad effect on genetic heredity, and it does not cause degeneration of the heart or of the brain cells or bring on any of the various other ailments attributed to it

Due to the fact, however, that alcoholics tend to drink more and more and to depend increasingly upon alcohol as a major source of their food, they often do not get an adequate diet As a result, most alcoholics suffer in the long run from vitamin and mineral deficiencies, their bodily resistance to disease is weakened, and they have a lower life expectancy than moderate drinkers or total abstainers

Though alcohol does not seem to be the direct cause of organic pathology, excessive amounts do obviously produce abnormal behavior at the time of intoxication. In addition, there are various psychotic reactions which typically develop in individuals who have drunk excessively over long periods. The precise relationship between the alcoholism and the psychoses has not yet been fully determined. It is thought by some investigators that the only one of these reactions directly attributable to alcohol is delirium tremens. Even here, however, there is considerable difference of opinion

PSYCHOSES ASSOCIATED WITH ALCOHOLISM

Psychoses associated with alcoholism can conveniently be divided into two types acute reactions and chronic reactions

Acute reactions. These psychotic reactions usually last only a short time and consist mainly of confusion, excitement, and delirium. There are four commonly recognized sub-types: (1) pathological intoxication, (2) delirium tremens, (3) acute alcoholic hallucinosis, and (4) Korsakoff's psychosis.

1. *Pathological intoxication* is an acute reaction which occurs in persons whose tolerance to alcohol is very low (such as epileptics or those of an unstable make-up) or in normal persons whose tolerance to alcohol is temporarily lessened by exhaustion, emotional stress, or other conditions With even moderate amounts of alcohol, the patient may suddenly become hallucinated and disorientated, and may evidence a homicidal rage During this confused state such patients sometimes commit crimes of violence. For example, Binswanger[4] found that 26 of 174 patients of this type had been charged with crimes such as manslaughter, attempted murder, arson, burglary, or sexual assault. This confused, disoriented state is usually followed by a period of deep sleep, with complete amnesia afterwards. The following case history shows the pattern.

The patient was hospitalized following an altercation in a bar in which he attacked and injured a woman and her escort On admission to the hospital he seemed very friendly and cooperative—in fact, almost servile in his desire to please those in authority His personal history revealed that he had been involved in five such incidents during the last two years.

Psychiatric evaluation revealed a family background torn with bickering and dissension Both parents were stern disciplinarians and severely punished the patient for the most minor disapproved behavior He was taught to feel that sex was very evil In addition, they impressed upon him the importance of being "somebody" but rejected him in the family constellation Thus he was burdened with a high level of aspiration while at the same time the parental rejection made it extremely difficult for him to feel adequate and worth while

The patient manifested a high level of ambition but with unclear and unrealistic goals. He wanted to be "king of the hill," as he put it, but seemed vague as to just what this meant in terms of actual achievements Although of superior intelligence, he had been handicapped by his lack of direction and his inability to maintain satisfactory interpersonal relations over a period of time Apparently because he felt that both his parents and society had rejected him, he showed considerable repressed hostility. This hostility was not focused, but rather was diffuse and directed toward people and the world in general Although he revealed strong sexual desires toward women, his feelings were colored by sin, guilt, and hostility, which made a normal heterosexual adjustment impossible

The patient had been involved in five previous altercations and was arrested twice for disturbing the peace In each case these incidents took place in bars where the patient, after a few drinks, would become aggressive, loud, and abusive, and would dare any and all to do anything about it On several occasions he threw his drink in the face of someone close by, and on one occasion hit a bartender over the head with a bottle of scotch during an ensuing altercation His last escapade and arrest involved an attack upon a woman; this had apparently been provoked by her kissing her escort and making what the patient interpreted as sexual overtures in public. At this point the patient approached the woman in a threatening manner, slapped her, knocked her escort out when he attempted to intervene, and then hit her several times with his fists before he was forcibly restrained by other customers The patient was amnesic for the entire episode, apparently "coming to" on his way to the hospital

It was felt in this case that the woman's behavior aroused unacceptable and therefore threatening sexual desires in the patient, against which he defended himself by becoming hostile and attacking her The alcohol apparently served to lower the patient's normal behavioral restraints, permitting his hostility to be expressed in overt antisocial behavior

2. *Delirium tremens* is probably the best known of the various alcoholic psychotic reactions It occurs in about 4 per cent of those who have drunk excessively for a long time This reaction may follow a prolonged alco-

holic debauch or may occur during a period of abstinence in connection with a head injury or infection Contrary to common opinion, it is probably not due to the sudden cessation of drinking

The delirium is usually preceded by a period of restlessness and insomnia during which the patient may feel generally uneasy and apprehensive Slight noises or a sudden moving object may cause considerable excitement and agitation. The full-blown symptoms include (1) disorientation for time and place, in which patients may mistake the hospital for a church or jail, friends are no longer recognized, and the doctor and hospital attendants may be mistaken for old acquaintances, (2) vivid hallucinations, particularly of small, fast-moving animals like snakes, rats, and roaches, (3) acute fear, in which these hallucinated animals may change in form, size, and color and terrify the patient, (4) extreme suggestibility, in which the patient can be made to see almost any form of animal if its presence is merely suggested to him or if he is asked what he sees on the wall, (5) marked coarse tremors of the hands, tongue, and lips (as indicated by the name of this disorder) and other symptoms including perspiration, a rapid and weak heartbeat and fever, a coated tongue, and a foul breath

The hallucinatory animals the patient sees may lead to terrified cowering in a corner or he may stand up in his bed and desperately fight off the menacing creatures This acute fear may extend beyond the various insects and animals which the patient sees to a general state of terror in which he feels that something horrible is going to happen to him. As a result, he may attempt suicide

The delirium usually lasts from three to six days and is usually followed by a deep sleep When the patient awakens he has few symptoms, aside from possible slight remorse, but he frequently will have been rather badly scared and may not resume drinking for several weeks or months. Usually, however, there is eventual resumption and a return to the hospital with a new attack The death rate in delirium tremens as a result of heart failure or bronchopneumonia is stated by Karnosh and Zucker[16] to be as high as 10 to 15 per cent.

The following is a brief description of a 43-year-old male patient who was hospitalized for delirium tremens

The patient was forcibly brought to the psychopathic ward of a general hospital when he fired his shotgun at 3:30 A.M while "trying to repel an invasion of cockroaches." On admission he was confused and disoriented and had terrifying hallucinations involving "millions and millions" of invading cockroaches He leaped from his bed and cowered in terror against the wall, screaming for help and kicking and hitting frantically at his imaginary assailants When an attendant came to his aid, he screamed for him to get back out of danger or he would get killed too Before the attendant could reach him he dived headlong on his head, apparently trying to kill himself.

The patient's delirium lasted for a period of 3½ days, after which he returned to a state of apparent normality, apologized profusely for the trouble he had caused everyone, stated he would never touch another drop, and was discharged. However, on his way home he stopped at a bar, had too much to drink, and on his emergence from the bar collapsed on the street This time he sobered up in jail, again apologized for the trouble he had caused, was extremely remorseful, and was released with a small fine His subsequent career is unknown.

In many cases of delirium tremens and other acute psychotic reactions, there may be a residue of various psychotic symptoms after the immediate acute alcoholic reactions have been cleared up. In such cases it may be assumed that the alcoholism developed concomitantly with an underlying psychosis This psychosis may be of a schizophrenic, manic, or other nature In each case the psychosis develops in accordance with the underlying personality organization of the patient and is

merely accentuated or precipitated by the alcoholic episode

3. In *acute alcoholic hallucinosis,* the main symptoms are auditory hallucinations At first the individual will hear a voice which comes from some one person and may merely make certain simple statements With time, however, the hallucinations usually extend to the voices of several people, who become critical and reproachful The patient's innermost private weaknesses, particularly those of a sexual nature, are itemized and discussed, and various horrible punishments are then proposed by the voices The patient may hear the clanking of chains, or the sharpening of knives, or pistol shots, or footsteps approaching in a threatening manner Terror-stricken, he may scream for help or attempt suicide.

This condition may continue for several days or even weeks, during which time the patient is depressed but fairly well oriented and coherent, except for his hallucinations After recovery, he usually shows considerable remorse and some insight into his previous behavior

Investigators are less inclined than formerly to attribute this psychotic reaction directly to alcohol, but have in the main adopted the attitude that it is based on an underlying disorder which is merely precipitated by the alcohol and could have been precipitated by drugs, illness, exhaustion, or other stresses This was apparently the situation in the following case

The patient was hospitalized after a suicidal attempt in which he slashed his wrists He had been hospitalized once before after a similar incident in which he tried to hang himself with a bath towel He was unmarried and lived alone

The patient had been drinking excessively for a three-year period He was not in the least particular about what he drank as long as it contained alcohol For several days prior to his last suicidal attempt he had heard voices which accused him of all manner of "filthy sex acts." He was particularly outraged when they accused him of having committed homosexual acts with his mouth and of having had relations with animals He complained of a terrible taste in his mouth and imagined that his food had been poisoned as a means of punishing him for his sins He was generally fearful and apprehensive and slept poorly

After a stay of two weeks in the hospital, the patient made a good recovery and was discharged At this time he seemed to have some insight into his difficulties, stating that he felt that his sexual problems had something to do with his suicidal attempt

4. *Korsakoff's psychosis* was first described by the Russian psychiatrist Korsakoff in 1887 The outstanding symptom is a memory defect, particularly for recent events, which is concealed by falsification Zangwill[44] cites a case in which the patient was unable to recognize pictures, faces, rooms, and other objects as identical with those just seen, although they did appear to him as similar Such patients increasingly tend to fill in gaps with reminiscences and fanciful tales which lead to unconnected and distorted associations They may appear to be delirious, hallucinated, and disoriented for time and place, but ordinarily their confusion and disordered conduct are closely related to their attempts to fill in memory gaps The memory disturbance seems to be associated with an inability to form new associations, thus new events are not retained and related to past events This reaction usually occurs in older alcoholics, after many years of excessive drinking Other symptoms include peripheral neuritis with tingling of the extremities, and in certain severe cases there may be abolition of the tendon reflexes and wrist and foot drop

All of the disturbances in Korsakoff's psychosis are now known to be due primarily to a deficiency of vitamin B rather than to alcohol, and a vitamin-rich diet generally restores the patient to relatively normal physical and mental health However, some person-

ality deterioration usually remains, in the form of memory impairment, blunting of intellectual capacity, and a lowering of moral and ethical standards. These changes may be evidence of the psychological deterioration which frequently occurs in prolonged alcoholism rather than of any physiological toxic effects of the alcohol itself In any event, post-mortem studies of the brains of persons who have died in the course of Korsakoff's psychosis reveal no gross organic lesions or damage such as might be expected if the symptoms were of organic origin

The following case history describes a patient diagnosed as suffering from Korsakoff's psychosis.

"The patient is a white, thirty-two-year-old married man, a business executive.

" . . There was nothing significant in the personal history until about ten years ago when the patient began the excessive use of alcohol during the course of frequent entertaining Although the patient was periodically intoxicated, he merely demonstrated overtalkativeness He did not stagger or show other symptoms During the year prior to admission he drank one pint to one quart of whiskey a day Two months ago he lost consciousness after consuming a great deal of whiskey at a tavern The following day he was delirious and was disoriented in all spheres. He remained in this condition for three or four days.

" . The patient was cared for at home under the observation of his family physician and day and night nurses He was delirious . showed lack of muscular coordination, and vomited His memory was very poor He would repeat questions over and over There was some indication of hallucinosis in that the patient asked the nurse several times if she had spoken to him when nothing had actually been said He demonstrated delusions of infidelity, accusing the doctor of unbecoming conduct with his wife, and asked for a razor to cut the doctor's throat On one occasion he set a stool on fire and called the nurse to see it burn On numerous occasions he set the bed on fire with cigarettes At times he was irritable, going from room to room, slamming doors and throwing things about

"Since admission to the hospital he has been orderly and quiet on the ward, though he is slightly restless and has difficulty in concentration He holds himself aloof from other patients and is annoyed by their questions. He is cooperative to the best of his ability although he is still confused and occasionally dresses himself improperly. He attends occupational therapy classes where he does craftwork. At all times he is quite agreeable He does not demonstrate any abnormal movements or mannerisms Sleep and appetite are satisfactory He volunteers conversation but is reticent in speaking of his own difficulties and is inclined to be desultory and irrelevant He showed no neologisms but has demonstrated some stereotyped expressions His handwriting is studied and tremulous He has very poor retention of school knowledge although his intelligence is evidently normal or above average There is some narrowing of the mental horizon in respect to his present plight He is oriented in all spheres and conscious of his surroundings although prior to admission he had periods of disorientation He shows marked defect in recent memory and fabricates. There is some internal distractibility and looseness of thought construction The patient attempts at all times to present a good appearance His stream of thought is not very well connected, and there is circumstantiality in his verbal production He denies hallucinosis in any sphere, has not demonstrated any impulsive conduct or other behavior which might be interpreted as response to hallucinosis He has no insight and is embarrassed by his inability to remember. He has not expressed any delusions since his admission He shows labile emotional control and at times it is questionable whether his affective response is adequate.

"Physical examination shows the patient to be in an essentially normal state of health." (Biddle and Van Sickel[8], pp 282-283)

Chronic alcoholic deterioration. The habitual use of excessive amounts of alcohol

as a means of adjusting to life's problems is frequently accompanied by general personality deterioration, with a gradual intellectual and moral decline. Often there will be disturbances of memory, judgment, and ability to concentrate. The patient becomes coarsened and impulsive in behavior, takes less and less responsibility, loses pride in personal appearance and neglects his family, becomes touchy and irritable concerning his drinking and will brook no interference He is no longer able to correct his excessive drinking and engages in obvious rationalizations to justify his behavior Alcohol may, through lessening his inhibitions, have the effect of stimulating sexual desire, which may lead to attempts at deviant sexual patterns that outrage and antagonize the wife or husband In his relations with outsiders the male patient is frequently fawning and servile, at home he becomes a tyrant and makes life miserable for his wife and children (Baird[2]).

The following case of a 35-year-old alcoholic shows the way in which this pattern often develops

The patient stated his problem with much self-recrimination upon admission to the hospital "My trouble is all my own fault for behaving so stupidly. I just couldn't get used to the idea of being a plain civilian and not a captain in the Army any more. Instead of doing something about it, I got into the habit of drinking and before long I had no job, no ambition, no wife, and no nothing. I acted like a damn fool My family was right in having me committed"

The patient made a very poor postwar adjustment and for the past four years had been drinking excessively. Twice he had attempted suicide by slashing his wrists with a razor blade, but in each instance the cuts were too superficial to endanger his life. Having no particular occupational skills, he found civilian life a serious letdown from his Army rank and prestige Several times he made up his mind to go back to school and become a great surgeon or lawyer, but he seemed to lack the initiative to get started He spent a great deal of time at a particular tavern, where he found persons who remembered him as a "Captain" and praised him for his Army service while he paid for their drinks

To complicate matters further, the patient was continually prodded by his father, brother, and wife to find something constructive to do His wife, whom he had married while in service, complained bitterly about his lack of ability to earn enough money to support her properly as he had done during his Army career She finally threatened him with divorce unless he pulled himself together and straightened out their financial situation To keep going, the patient borrowed money from his father and attempted various minor jobs which he could not stomach and invariably failed at He began to drink more heavily during this period and became belligerent and combative when any of his family questioned his drinking habits or tried to get him to cut down his consumption In reaction to the nagging of his wife he hit her across the mouth and she packed up and went home to her parents

Finally the patient got the idea that if he just had a business of his own, perhaps this would solve his difficulties His father and brother encouraged him in this and furnished the money for the opening of a service station However, the patient continued his heavy drinking, engaged in unwise purchases of merchandise, and insisted on telling his customers about his triumphs in the Army, explaining that he was only running a service station until he could find his proper niche In consequence, his business was poor. To pay his service-station and alcohol bills, he overdrew his account and his father had to make good At this time the patient was drinking so much that he managed to get to the station only late in the afternoon Finally he refused to go to work at all. As a result, his father and brother closed the station However, the patient could not accept the idea that the service station was not making money and continued to write checks on the gas station's account, which his father again made good. Finally, matters came to a climax and in a quar-

rel with his father over money matters the patient threatened to kill him, whereupon the father had him hospitalized

Although he seemed to have some insight into his problems, he was extremely immature, prone to self-pity, and resistant to therapy

DYNAMICS

As we have noted, the problem of alcoholism has received unprecedented attention in the past fifteen years in both psychiatric and lay circles, and the older ideas of alcoholism as a moral and religious problem have been once and for all dispelled. This does not mean that religious values have no place in the treatment of alcoholism but rather that alcoholism is essentially a psychiatric and not a religious or moral disorder

Among other older notions that have been dispelled is the idea that alcoholism is primarily based upon some genetic weakness or predisposition or hereditary taint. For example Roe *et al.*[34] followed the histories of 36 children of severely alcoholic parents after they were placed in foster homes and found that the expectancy of their becoming alcoholics was no greater than that of a control group of 25 children who came from nonalcoholic parents.

Also dispelled is the notion that the alcohol is a direct or sole cause of the alcoholic psychoses. We now realize that the alcoholism is itself merely a symptom of underlying personality maladjustment That is what is meant by the term "symptomatic drinkers"—such individuals are mentally ill or unstable to begin with, and the excessive use of alcohol is a symptom of their illness rather than the cause of it

There are many reasons why people drink. They may do it as a socially accepted means of enlivening parties, or to get on with their work, or in situations of physical danger, or as a relief from tension, or to forget some unpleasant experience, or to escape too-difficult problems, and so on Since these conditions are frequently associated with excessive use of alcohol, drinkers may profitably be classified accordingly (Hirsh[15], Simmel[39])

1. *Occupational drinkers*—bartenders, salesmen, newspaper reporters, actors—who fall into the habit of drinking in connection with their work. Often they cannot converse or carry on their business with others without drinking or offering drinks to those with whom they must deal

2. *Situational drinkers*—those who drink because of some emotional crisis or hurt, such as a divorce or financial loss, or to reduce the anxieties connected with a particular situation. Under very stressful conditions, even relatively stable individuals may drink excessively Excessive drinking was not uncommon among Air Corps personnel in World War II However, they did not ordinarily become excessively dependent upon alcohol for a solution to everyday problems Rather they drank to dull their immediate acute tensions and anxieties, and when the stress situation was alleviated they ceased to drink excessively Of course, if these excessive stress conditions were to continue, it is possible that many of these individuals would be pushed beyond their stress tolerance and would become chronic alcoholics.

3. *Neurotic drinkers*—those who drink to forget temporarily the drabness of their lives or to escape from the anxiety and depression of their unconscious conflicts Although this is not an infrequent pattern among male anxiety neurotics, who often drink to dull their anxieties, it would appear that the largest number of neurotics who turn to alcohol are women

4. *Psychotic drinkers* Many psychotics indulge excessively in alcohol as a result of the lowering of behavioral restraints and/or as an attempt to deal with and escape from their anxieties and conflicts Such cases are usually diagnosed in the light of their general psychotic reaction, rather than as alcoholics proper, for when their psychosis clears up, their excessive drinking usually does also

5. *Character disorder drinkers*. Many in-

dividuals classified as suffering from immaturity reactions, antisocial (psychopathic) personality, and other character disorders often indulge excessively in alcohol. These individuals are characteristically impulsive and lacking in normal behavioral restraints and are prone to deviant and unconventional behavior in general Again such drinkers are usually classified under the appropriate character disorder rather than as alcoholics per se

6. *Typical alcoholics.* These individuals fit properly into none of the preceding categories, although they may have a smattering of personality characteristics from any or all of them They are characterized primarily by the use of alcohol as a crutch in helping them to meet the normal problems of everyday life Unfortunately, the crutch usually gets in the way of effectively meeting their problems and eventually becomes a means of escape.

In further exploring the psychological factors in alcoholism, it is well to repeat that alcohol is a rapidly acting solvent of unpleasant reality, both internal and external, and leads to feelings of euphoria, well-being, and self-esteem Since it is easily obtainable and to a large extent socially acceptable, we have a ready-made reaction pattern which makes possible an escape from unpleasant reality. Consequently, as we might expect, most of our chronic alcoholics are those who have turned to alcohol as a habitual means of screening out painful external and internal realities Alcohol makes the multitude of responsibilities and problems involved in civilized living less overpowering But because the alcohol actually interferes with any real solution of their problems, the reasons for anxiety increase, leading in turn to more alcohol in the form of an out-and-out escape reaction Of course, many individuals achieve a marginal adjustment to their permanent stresses by becoming excessive drinkers, the alternative would have been to develop other abnormal reaction patterns such as a neurosis or a psychosis

What kind of personality is likely to adopt this adjustment pattern? Studies have failed to show any "alcoholic type," though alcoholics are often somewhat immature passive-dependent persons with an unrealistically high level of aspiration and an inability to tolerate failure They tend to have a rather naive opinion that whatever they want should be theirs for the asking, with little regard for the opinions or feelings of others Such individuals are usually very sensitive and prideful and react to frustration with marked feelings of hurt, inferiority, and inadequacy. Tiebout[40] states that these traits can readily be seen in the alcoholic's recreational activities In golf, he may adopt a superior attitude and brag excessively about his playing. Such behavior seems to make him feel important in his own eyes, and he enters into the activity with great gusto. These pleasurable feelings of importance may later be reversed to deep feelings of inadequacy and unimportance when he loses the game or fails to live up to his expectations, as is apt to happen because the alcoholic so frequently aims far above his natural ability

The problem of the chronic alcoholic inevitably involves his family, friends, and frequently his business associates, and usually leads to a close acquaintance with the police, public hospitals, and various social agencies. As a rule, the alcoholic's financial condition suffers, to the detriment of his wife and family Frequently the wife has to support the family and may even be forced in addition to give part of her hard-earned money to the patient for additional alcohol.

In the background of these patients is usually a history of broken or undesirable homes and early unhappy experiences which tend to undermine the child's feelings of adequacy and security (Lawn[19]) Schilder[37] and Gray and Moore[13] place particular stress on prolonged conditions of insecurity dating from earliest childhood. Similarly, Moore and Gray[22, 23] and others have emphasized the importance of overprotection and pampering in childhood, which lead to a failure in development of independence and to exagger-

ated ideas of self-importance that cannot hold up in the face of adult reality In general, it would appear that any conditions in childhood which are conducive to the development of later psychopathology—that is, factors which retard the development of emotional maturity, self-confidence, and independence in dealing with life's problems or which lead to the acceptance of unrealistic goals—are also conducive to the development of alcoholism.

Perhaps we may summarize the dynamics in alcoholism by stating that the alcoholic is typically an immature, dependent individual with an unrealistic level of aspiration and an unwillingness to make the sacrifices in terms of time and energy necessary for even mediocre success. His need for high achievement makes it impossible for him to accept himself and his life situation realistically, while at the same time he feels hopelessly inadequate to achieve his goals. Even where he does achieve some measure of success, his perfectionistic ambitions and his underlying feelings of insecurity usually leave him with feelings of failure, inferiority, and anxiety As a result, he finds in alcohol a convenient means of escaping from his frustrations and conflicts. With the aid of alcohol he can achieve false but gratifying feelings of adequacy and self-esteem and blissful insensitivity to his limitations Unfortunately, as he comes to lean more and more upon the temporarily satisfying process of alcohol as a solution to his difficulties, he steadily regresses to a lower level of initiative, responsibility, and general adjustive functioning.

TREATMENT, PROGNOSIS, AND PREVENTION

Habitual turning to alcohol is a pattern highly difficult to eradicate. During sober moments the victim may make all sorts of promises to himself and others to stop drinking, then, when anxiety and unpleasant reality mount, he finds the escape into pleasant unreality too tempting to resist.

For a long time the excessive drinker may maintain a rather grandiose idea of his own abilities and assure himself that he can become a controlled drinker if he wants to. At some point along the way he finds that a habit has become an obsession. Now he no longer needs his rationalizations to justify his first fatal drink. All he knows is that he is swamped by elation or uneasiness, and before he realizes what is happening he is standing at a bar with an empty whiskey bottle in front of him He may go on trying to defeat his obsession and wind up in a sanitarium, or he may give up the fight as hopeless. He may try to kill himself Or he may seek outside aid.

Uselessness of a moralistic approach. It was at one time thought that if the therapist could only make a man sufficiently ashamed and remorseful about drinking, he would surely stop. We know now, however, that the more humiliated the alcoholic is made to feel, the greater are his chances of returning to alcohol in order to escape the increasingly unpleasant picture of his worthlessness.

Various other methods have been used in the treatment of alcoholism, including punitive measures, convulsive therapy, and appealing to the patient's religious convictions. They have not proved sufficiently effective to be treated in our present discussion.

Modern methods of treatment. The modern treatment of alcoholism is based on the present realization that drinking is primarily the result and not the cause of the individual's difficulties Acute reactions and hangovers may of course require special medical attention in the form of sedatives, hot baths, washing of the stomach, special vitamin diets, and so on. In chronic reactions, also, every attempt is made to improve the physical condition of the patient in terms of high vitamin diets and the correction of any organic pathology. However, if treatment is to be effective over a long period of time—that is, if it is not to be mere emergency measures to take care of an immediate case of delirium tremens,

for example—steps must be taken to strengthen the patient psychologically so that he will no longer find it necessary to rely upon alcohol in meeting life's responsibilities and problems This generally requires a long period of psychotherapy, which is ordinarily best undertaken in an institution, for this enables the removal of the patient from his traumatic life situation and his treatment in an atmosphere geared to meet his particular needs Psychotherapy in private practice often fails with alcoholics because there is no means of controlling the environment and preventing alcoholic relapses

Before such psychotherapy can be effectively undertaken, the patient must be taken off alcohol completely To help achieve this result, the so-called conditioned-reflex method has been widely used The ancient Romans employed it by placing a live eel in a cup of wine (*Time*[41]). Forced to drink this unsavory cocktail, the alcoholic would presumably be disgusted and would be nauseated by wine thereafter. Today this method consists of the use of emetine or a similar drug which causes the patient to become severely nauseated if he drinks even a small amount of his favorite alcoholic beverage. He soon learns to associate the nauseating experience with the sight of the alcohol and thus becomes conditioned against its use

This conditioned-reflex therapy is not advocated as the sole therapy, however, but is regarded merely as a valuable method of interrupting the alcoholic cycle for a period of time during which intensive psychotherapy may be utilized The latter is of course designed to help him gain insight into his difficulties and reactions, to lower his aspirations to more realistic levels, and to strengthen him along lines of adequacy and self-acceptance so that he can cope with his life situation without resort to alcohol The combination of the conditioned-reflex method and psychotherapy is relatively effective, resulting in cures in from 50 to 70 per cent of all cases (Edlin *et al.*[8], Voegtlin and Lemere[43], Menninger[21]).

A practical approach to the problem of alcoholism which has met with considerable success is that of *Alcoholics Anonymous* This organization was started by a group of cured alcoholics and has had such a remarkable growth that its facilities are now available to alcoholics in almost every city and town in the United States Essentially, Alcoholics Anonymous operates as a form of group psychotherapy The meetings are partly devoted to social activities and entertainment, and partly to discussions of the problems of the alcoholic, usually with testimonials from members who have been cured Although belief in a higher power is encouraged, there are no specific religious affiliations. Every attempt is made to integrate each individual into the group so that he feels himself an important member, participates in efforts to help other alcoholics, and enjoys the social fellowship In this way the new life and purpose and the sense of fellowship become more important than his old isolation and his superficial social relationships at bars Thus, by mutual support and reassurance through participation in the group, each individual is enabled gradually to develop insight into his problems, greater ego strength, and new techniques in dealing with his problems.

Reports on the success of Alcoholics Anonymous indicate that some 50 per cent of the alcoholics taken into the group recover almost immediately, another 25 per cent get well after suffering a relapse or two, and the remainder are failures (Alexander[1]) It may be noted in comparing these statistics with those of combined conditioned-reflex treatment and psychotherapy, that Alcoholics Anonymous is helpful only with patients who are willing to admit that alcohol has defeated them and who are desirous of being cured. If the patient does not want to be cured and still thinks that his drinking is either justified and excusable or that it can be brought under control when he gets ready, then a cure is ordinarily not even attempted

A well-coordinated approach to the treat-

ment of the alcoholic patient has been undertaken by Winter Veterans' Administration Hospital with most encouraging results. The total environment of the patient is oriented toward therapeutic goals. This includes individual and group psychotherapy, participation in the local Alcoholics Anonymous group, which holds weekly meetings in the hospital, the use of various therapeutic aids such as occupational and recreational therapy, efforts by social workers to deal with the patient's relatives, and the cooperation of community agencies in facilitating discharge plans and rehabilitation in the community

The following is an excellent case history which illustrates this team approach and highlights sharply its greater effectiveness as compared with previous methods

"A 38-year-old store clerk was brought to the hospital for the fourth time by deputy sheriffs, following a drinking bout culminating in disorderly behavior, imprisonment, and delirium tremens The history revealed that he was an only child, was weaned early, and toilet-trained remarkably early. His father died when he was four years old The patient was reared by an indulgent but poor paternal grandmother until he was ten years old, seeing his mother only on weekends She was extremely demonstrative and affectionate. When he was ten, his grandmother died and the patient was placed in a foster home where the atmosphere was authoritarian and punitive At 14, he quit school, though he would have liked to continue and become an engineer He joined his mother and from then on held various jobs, eventually working his way up, by the age of 30, to assistant manager of a chain-store unit His relationships with his mother through these years continued superficially close, though marked by arguments and recriminations when in his late teens he began to spend his evenings away from home As he earned more money he became a flashy dresser and sexually promiscuous, carefully concealing his activities from his mother.

"At 22, he married against the wishes of his mother, who continued to reside in the same house There was bickering between his wife and mother and he also felt they made common cause against him He had two children and experienced the frustration of feeling that his wishes received scant consideration in their upbringing

"By the time the United States entered the war, he was drinking fairly heavily, but not to the extent of seriously interfering with his work. Rather impulsively, and against the combined opposition of his wife and his mother, he enlisted in the Army. His Army record was generally excellent He earned a sergeant's rating and was in combat as a machine gunner at Anzio His drinking in the Army was quite moderate, until after the war in Europe was over, when it became very heavy

"He came home to a deteriorated domestic situation His wife and his mother were scarcely speaking to each other and each accused him of siding with the other He continued to drink heavily, became involved in tavern brawls, and lost several jobs in quick succession There was much wrangling over finances and then charges and countercharges of infidelity. Finally his wife left with the children and secured a divorce The patient was ordered by the court to pay for their support He made several attempts to quit drinking, but each time became intolerably tense and suffered from recurrent battle dreams.

"His first admission to Winter VA Hospital was a means of evading a jail sentence for disturbing the peace His manner in the hospital was self-accusatory and remorseful, but as soon as he gained some physical well-being he was impatient to leave, said he knew now why he drank, and that it would never happen again. He was discharged, only to return in two months, following his first attack of delirium tremens This time he was under court commitment and remained in the hospital longer He was transferred to an open ward, which he promptly left without permission, and returned drunk Eventually he was discharged with seemingly nothing accomplished His third hospitalization was brief and as unsuccessful as the preceding two Psy-

chological testing on this admission revealed a narcissistic character disorder with strong depressive coloring

"He was admitted for the fourth time, again under court commitment and, after a brief stay in the locked ward, was transferred to the alcoholic ward, which had just been organized along the present lines His manner was at first arrogant and hostile, and he did not do his part in the routine ward assignments The physician deferred comment on his uncooperativeness, but the patient sensed the group disapproval of his ward mates In addition, he became friendly with one of the psychiatric aides, as an outgrowth of an exchange of war experiences One morning, without comment he took his place on the ward detail He had always been a hard worker when sober, finding some relief from anxiety in work On his own initiative he became interested in the printing shop and applied himself diligently to learning the offset printing process He attended group therapy sessions on the ward but was for a long time a passive listener One day he surprised the therapist by offering a thoughtful comment that seemed to show a real insight into his problem Afterwards, the therapist invited him to discuss the point further in the office, and the talk served as a basis for a distributive analysis, in the course of several face-to-face hours, of the patient's habitual reaction patterns For the first time he appeared ready and anxious to examine his ambivalent feelings toward his mother, toward his former wife, and toward all women

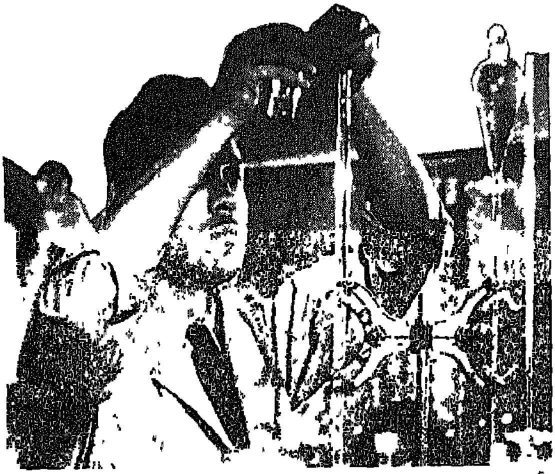
"In the next several weeks he was granted passes, first in the company of a member of A A, in which organization he was now intensely interested, then in his own custody On one of these passes, he visited his mother and was so upset by her possessiveness and oversolicitude that he almost started drinking again However, he was able to return to the hospital, talk it over with the therapist, and successfully apply his newly won insights to the situation Approximately four months after his fourth admission he returned to his home town and a job in a printing shop, which he had located with the assistance of the hospital vocational rehabilitation office With the help of the social worker he had made arrangements to live apart from his mother His evenings are spent largely in the local A A club.

"Several times he has had recurrences of his old tension states and depression and has come dangerously close to a "slip" With the support of his A A friends and two return visits to his therapist, he has weathered these We do not have further psychological tests on this patient but have much clinical evidence of diminution of tensions, less impulsivity, and less narcissistic personality organization Now, ten months after discharge, his prognosis is at least fair and improving with every month" (Haber *et al*[14], pp 28-30)

Difficulties in the way of modern treatment for the alcoholic. Alcoholism is one of the most serious of the major health problems facing the United States today. There are more chronic alcoholics than active cases of tuberculosis It is therefore alarming to realize that there is an almost total lack of hospital facilities for these sick people According to the Medical Director of The Research Council on Problems of Alcohol

"A tour through the 'Skid Rows' of our cities, which include the Bowery in New York City, will remind one of the Russia of a century ago described by Tolstoy, a time when there were few asylums or hospitals for the mentally ill and nearly everyone had a neighbor with some mental disorder These people were part of the landscape as our inebriates on the skid rows and the boweries of our cities are today At the present time, in this country most of the mentally ill have been removed from the streets and provided with facilities and treatments undreamed of but a few years ago This is not true of the alcoholic" (Duryea and Hirsh[7], p 247)

The fact is that in most communities, the only public institution willing to accept the alcoholic is the jail In some of the large cities an alcoholic in serious condition will be ac cepted for emergency treatment in the mu





Treatment of Alcoholism

Pictures courtesy of March of Time
from its film Problem Drinkers

At present, 25 million dollars yearly is spent on the maintenance of "drunk tanks" in local jails throughout the country From them, alcoholics emerge sober—but uncured Less than half that amount spent on research—perhaps 10 million—could go far to eliminate problem drinking At present, however, less than 1 million dollars is being spent each year by government and private agencies to cope with problem drinking Slowly this wasteful situation is being changed

Outstanding in the field today is the Yale School of Alcohol Studies, where for years the physiologists have been conducting experiments to determine the nutritional, physical, and psychological effects of alcohol, the relation of alcoholism to heredity, and other related problems On this page we see pictures of technicians at the Yale School Laboratories studying the effects of alcohol on white rats.

Closely connected with the school is the work of the Yale Plan Clinic, which treats alcoholics referred by social agencies or applying for help on their own initiative Treatment is in four phases (1) The patient is interviewed, to determine prognosis for recovery (2) He is given a physical examination (3) He receives psychiatric treatment. (4) His home and social environment are investigated by a social worker, and attempts





are made to change home conditions if necessary The Clinic's work is limited to New Haven and Hartford, Connecticut, but a similar approach has gradually been adopted in various other localities

The Yale School also has wide influence through the regular publication of its findings and through its special summer sessions, when picked community leaders come to learn and discuss the nature, treatment, and prevention of alcoholism, and return to their home communities to put their knowledge into practice The picture at right shows a lecture during one of these sessions



nicipal hospital, but will be discharged as soon as he is "sober" In many of these hospitals, as well as in many jails, conditions are crowded and unsanitary In most of our local jails, chronic drinkers and episodic drunks constitute 50 to 60 per cent of the inmates Jails thus serve as mental institutions, a function for which they are not staffed or equipped or legally intended

Part of the reason for this wasteful and ineffectual treatment of alcoholics is that the alcoholic is often regarded as a comic or grotesque figure, and that an aura of embarrassment, blame, and guilt surrounds him in the public's eyes Frank discussion of the problems of alcoholism is as taboo today for some persons as was discussion of syphilis, tuberculosis, or cancer 25 or 50 years ago

Fortunately, the picture is changing, though slowly In a few states, notably Oregon, New Jersey, Connecticut, New Hampshire, and Alabama, organized work on alcoholism has been inaugurated, and in a few cities also—notably Des Moines, Cleveland, Charleston, Pittsburgh, Buffalo, Rochester, Washington, Boston, Chicago, and New York The number is growing. One of the most influential factors in the establishment of more adequate facilities of research, treatment, and public education has been the Yale School of Alcohol Studies, some of whose work is illustrated on these pages.

Another important force has been the Research Council on Problems of Alcohol[33], a scientific organization devoted to sponsoring and stimulating research, public education, and legislation concerning alcoholism For the immediate problem of treating the alcoholics who wander our streets and crowd our jails, they recommend that

1. The general hospital should admit all alcoholics (most do not now), classify them, and route them as follows
   a) The most seriously deteriorated alcoholics should be sent to farm or industrial colonies
   b) The symptomatic problem drinkers—the psychotic, feeble-minded, etc—should be sent to mental hospitals
   c) Less serious cases not requiring special institutional facilities should be treated in the general hospital, in either the out-patient or in-patient clinic
2. Custody and care of problem drinkers should be transferred from the police to the public health agencies, with custody assured for a sufficient amount of time to permit of effective rehabilitation
3. Public agencies established to cope with problem drinking should be an integral part of existing state, county, and city health departments
4. The many unknowns involved in the causes, methods of treatment, prevention, and rehabilitation of problem drinkers call for con-

tinuous research—medical, psychological, and sociological—if the facilities which governmental agencies are now establishing for problem drinkers are to be thoroughly effective. Existing medical schools and their affiliated hospitals should be encouraged to participate in publicly supported programs so that along with treatment and education may go further intensive research into the causes, treatment, prevention, and rehabilitation of excessive drinkers.

These are some of the lines which action on alcoholism is taking. Implementation of these principles will be slow, but is necessary if we are to overcome the obstacles to effective treatment of our great number of alcoholics.

In the meantime, leading business concerns throughout the United States are doing pioneer work in establishing medical and psychiatric programs to rehabilitate employees afflicted by alcoholism (N. Y. *Times*[26]). Following the lead of the du Pont and Consolidated Edison Companies are such important concerns as Eastman Kodak, Metropolitan Life Insurance Company, General Motors Corporation, the American Telephone and Telegraph Company, the Allis-Chalmers Corporation, the Standard Oil Company of New Jersey, and Union Carbide and Carbon Company. Many of these firms have conducted extensive surveys on the role of alcoholism in absenteeism, lowered productivity, and accident losses. More than a score have begun to provide alcoholic employees with medical and psychiatric treatment. Such treatment frequently involves prolonged psychiatric counseling or attention in an institution, and is usually provided through some outside agency, such as the Yale Plan Clinic, Alcoholics Anonymous, one of the twenty-two state commissions on alcoholism, or qualified physicians in nearby hospitals. Some of the companies—like Consolidated Edison—themselves offer psychiatric, therapeutic, and counseling service. A few plants have considered that employees who develop chronic alcoholism are eligible for disability pensions. Rehabilitation programs for alcoholic employees are becoming more and more common. Such practices in industry can do much to dispel the cloud of shame that surrounds the alcoholic and his family, as well as provide valuable help for the patient suffering from this disorder.

Prevention of alcoholism. The prevention of alcoholism is a particularly important problem in view of the widespread misery which it creates in our society, and also in view of the incompatibility of excessive drinking with the operation of automobiles and with other aspects of technological life. As in other mental illnesses, the prevention of alcoholism depends upon healthy personality development and upon the early detection and correction of unhealthy personality trends. Legal prohibition was apparently of little avail (Landis and Cushman[18]). Even if alcohol could be completely removed from public consumption, the individual would only be forced to develop other unhealthy personality defenses, hence his essential problem would not be solved. For, as we have noted, alcoholism is a symptom of underlying personality maladjustment and not a disease in itself.

As in other disorders, the longer the abnormal pattern has been used, the more resistant it is to treatment. To aid in the early detection of approaching alcoholism, the following warning signs have been suggested:

1. *Morning drinking.* One of the first danger signals for the frequent drinker occurs when he begins to drink in the morning as a means of reducing a hangover or because he wants a bracer to help him through the morning.
2. *Increasing consumption.* Another warning sign in the history of alcoholism is increasing consumption. This increase may be very gradual, but the individual is drinking more and more every month. Often the individual himself may begin to worry about his drinking at this point.
3. *Extreme behavior.* When the individual, un

der the influence of alcohol, commits various extreme acts which leave him feeling guilty and embarrassed the next day, his alcoholic indulgence is beginning to get out of hand

4 *Pulling blanks* When the individual forgets what happened the night before during his alcoholic bout, alcoholic indulgence is obviously becoming excessive This does not usually occur until the excessive drinking has continued for some period of time

A person showing the above pattern of warning signs is well on the road to becoming a chronic alcoholic, and the sooner corrective measures are undertaken the more favorable the prognosis in most cases.

DRUG ADDICTION

From the earliest records, opium and certain other narcotic drugs such as hyoscyamus and hemlock are known to have been used by man Early medical practitioners employed preparations containing opium for a multitude of physical and psychological ailments For example, Galen considered theriaca, whose principal ingredient was opium, as his favorite panacea·

"It resists poison and venomous bites, cures inveterate headache, vertigo, deafness, epilepsy, apoplexy, dimness of sight, loss of voice, asthma, coughs of all kinds, spitting of blood, tightness of breath, colic, the iliac poisons, jaundice, hardness of the spleen, stone, urinary complaints, fevers, dropsies, leprosies, the trouble to which women are subject, melancholy and all pestilences"

Even today, opium derivatives are still used for some of the above conditions. Among our major narcotic drugs are the derivatives of opium (morphine, heroin, paregoric, codeine), cocaine, which is derived from the cocoa shrub, and the derivatives of hemp, *Cannabis sativa* (marijuana, hashish) The drugs most commonly associated with personality disorders in the United States are morphine and heroin, cocaine, and marijuana Other drugs, such as the "barbiturates" (bromides, barbital, phenobarbital), may result in toxic symptoms such as delirium, confusion, and motor incoordination, but these are not ordinarily associated with severe personality disorders

The problem of drug addiction is a severe one in certain parts of the world, such as China, but in the United States, social disapproval, public education, and rigid control of the use of drugs by federal and local authorities have kept this problem at a minimum Yet it has by no means been eliminated here, and the relatively small number of known patients is not necessarily an accurate measure of the seriousness of the problem

At the present time there are an estimated 40,000 drug addicts in the United States (Menninger[21]) Psychoses associated with drug addiction or other exogenous toxins constitute less than 1 per cent of the first admissions to mental hospitals Figures for both addiction and related psychoses are much higher for men than for women

Drug addiction may occur at any age, but seems to be potentially more dangerous to young adults than to other age groups Pescor[28] finds that most persons first become addicted when they are between 20 and 29 years of age Very few individuals become addicted after the age of fifty This may, of course, be related to the fact that youth tends to seek adventure, excitement, and new thrills and does not realize the dangers inherent in trying out drugs for a new thrill Drugs or alcohol may also act as an escape and temporary emotional relief for young people suddenly cut adrift from parental overprotection and unable to make their way

SYMPTOMS

The symptoms in drug addiction vary with the type of drug, the amount used, and the

personality of the user. For this reason we shall consider the opiates, cocaine, and marijuana separately

Effects of opium. Morphine and heroin, the principal derivatives of opium, are commonly introduced into the body by smoking or eating, or by hypodermic injection. Immediate psychological effects typically include:

- Lessening of voluntary movement
- Decrease in sexual desire
- Drowsiness, but with clarity of mind
- Microscopic sense of time and distance
- Relief of pain
- Euphoria, with feelings of relaxation and contentment
- Pleasant reverie or daydreaming

The nature of certain of these opium effects is amplified in De Quincey's description of his own opium dreams originally published in 1822

"I seemed every night to descend, not metaphorically, but literally to descend, into chasms and sunless abysses, depths below depths, from which it seemed hopeless that I could ever reascend .. The sense of space, and in the end, the sense of time, were both powerfully affected Buildings, landscapes, etc were exhibited in proportions so vast as the bodily eye is not fitted to receive. Space swelled, and was amplified to an extent of unutterable infinity . . I sometimes seemed to have lived for 70 or 100 years in one night; nay, sometimes had feelings representative of a millennium passed in that time, or however, of a duration far beyond the limits of any human experience"—*Confessions of an English Opium Eater*

The pleasant effects last from 4 to 6 hours and are followed by a negative phase which produces a desire for more of the drug.

The use of opium derivatives over a period of time usually results in a psychological and physiological craving for the drug. The amount of time required to establish the drug habit varies, but it has been estimated that continual usage over a period of 30 days or longer is sufficient to establish the habit The user now finds that he has become physiologically dependent upon the drug in the sense that he becomes physically ill when he does not take it. In addition, the user of opium derivatives gradually builds up a *tolerance* to the drug so that larger and larger amounts are needed for the desired effects.

When addicts to opiates do not get a dose of the drug within 4 to 12 hours or longer after the previous dose, depending on the interval used by the addict, they start to experience what are called *withdrawal symptoms.* The character and severity of these depend on many factors, including the amount of the narcotic habitually used, the intervals between doses, the duration of the addiction, and especially the health and personality of the patient The symptoms are usually quite severe within 48 hours

The first symptoms to be noted are yawning, sneezing, sweating, and anorexia, followed by increased desire for the drug, restlessness, psychic depression and feelings of impending doom, irritability, muscular weakness, and an increased respiration rate. As time passes, these symptoms become more severe; in addition, there may be chilliness alternating with vasomotor disturbances or flushing and excessive sweating (this may result in marked pilomotor activity so that the skin of the addict resembles that of a plucked turkey), vomiting, diarrhea, abdominal cramps, pains in the back and extremities, severe headache, marked tremors The patient refuses food and water, and this, coupled with the vomiting, sweating, and diarrhea, results in dehydration and loss of weight Occasionally the patient may evidence delirium, hallucinations, and manic activity Cardiovascular collapse may also occur and may result in the death of the patient If morphine is administered at any point along the way, the subjective distress of the patient ends and physiological equanimity is restored in from 5 to 30 minutes.

If no morphine is given, the withdrawal

symptoms reach their peak in from 72 to 96 hours and are definitely on the decline by the fifth day. Usually all symptoms of withdrawal have disappeared by the eighth day As symptoms subside, the patient begins to eat and drink normally and rapidly regains his weight After withdrawal symptoms have ceased, tolerance has disappeared and death may result from taking the former large doses of the drug In fact, some patients undergo treatment so that they can begin all over again with smaller, less expensive dosages.

Occasionally an individual has enough self-control to use opiates without allowing them to interfere with his work and ruin his life. But this is rare, and the danger involved in the use of such drugs is very great, especially in the case of heroin, where tolerance may be rapidly built up so that large and therefore expensive amounts of the drug are soon required For most patients it is extremely difficult to break the physiological and psychological dependency which opium derivatives build up The addict increasingly centers his life around obtaining and using the drug, and so the addiction usually results in social regression or degradation due to the fact that he may be forced to lie and connive and steal and associate with undesirable companions and members of the underworld in order to maintain his dosage of drugs Ethical and moral restraints are usually progressively lowered, and lack of an adequate diet leads to ill health and increased susceptibility to a variety of physical ailments The typical clinical picture is one of progressive physical and psychological deterioration. In addition, the drug addict is usually ostracized by society, even after treatment, and often runs afoul of the law, since the illegal possession of narcotics is a criminal offense If arrested, he is usually treated as a morally degenerate criminal and put in prison with hardened criminals.

As in the case of alcohol, opium derivatives have been blamed for a wide range of physical ills Of course morphine is a toxin and in excessive amounts may make the user seriously ill or may even result in his death In lesser amounts, however, it does not appear in itself to impair physical health Extensive clinical examinations of large numbers of patients who had been morphine addicts for from 5 to 20 years failed to reveal any harmful physical effects of the use of the drug (Pescor[28]). The ill health and the general personality deterioration often found in opium addiction do not result directly from the pharmacological effects of the drug, but are typically the indirect result of the sacrifice of money, proper diet, social position, and self-respect as the addict becomes more desperate in his efforts to procure the required daily dosage of the drugs

In fact, in cases where drug addicts have the means to maintain both a well-balanced diet and an adequate supply of drugs without resorting to criminal behavior, they may maintain the drug habit over many years without any appreciable symptoms of either physical or mental illness Many famous persons, including Edgar Allan Poe and De Quincey, have been narcotic addicts In some instances even their closest associates were unaware of their drug habit (Goodman and Gilman[12]). Pescor[29] even goes so far as to state that most alcoholics would be better off on drugs than on alcohol if it were not for the greater social disapproval of drugs by society By "better off" he means that their general efficiency would not suffer so greatly

In a study of approximately 600 male-prisoner morphine addicts in the federal hospital for drug addicts at Lexington, Kentucky, Pfeffer[31] reports that only thirteen, or 2 per cent, were psychotic. Nine of these were schizophrenic However, the relation of the drug addiction to the actual psychotic symptoms was unclear, although the severity of withdrawal symptoms may precipitate a psychosis in psychologically handicapped persons This psychosis may or may not be of a toxic type In general, Pfeffer concludes that morphine does not in itself cause chronic psychoses

The following case history gives a very

brief view of the background and course of one case of morphine addiction

"A 28-year-old man with bad heredity, together with alcoholism and drug addiction in his father, was raised without discipline by his grandparents He inherited considerable wealth, was allowed all the money he could spend and consequently spent all the fortune except some that was so tied up he could not get his hands on it, kept dissipated company, deserted from three military schools, acquired syphilis, began to drink excessively at 18, and finally became addicted to morphine two and one-half years before admission through taking the drug to sober up from sprees, and had three previous treatments followed by relapses He demanded his release a few weeks after admission to the Lexington Hospital, claiming he was cured and had business to attend to, but he received no encouragement from his family and was compelled to stay in the face of threats to employ a lawyer and secure release through the court

"His attitude gradually changed so that he was willing to stay until cured, and after six months he was made a trusty on the farm He was discharged as cured 21 months ago and since then has married and settled down to a normal life of a farmer without dissipation with either alcohol or drugs" (Kolb and Ossenfort[17], p 913)

Effects of cocaine. Cocaine,* like the opiates, brings on a euphoric state lasting four to six hours, during which the addict experiences feelings of peace, contentment, and happy imagination. However, this blissful state may be preceded by headache, dizziness, and restlessness In predisposed persons acute toxic psychotic symptoms may occur with frightening visual, auditory, and tactual hallucinations such as the "cocaine bug." Cocaine is often used as a substitute for morphine when the latter is not available.

Unlike the opiates, cocaine has a very definite stimulating effect on sexual processes Consequently, individuals with perverted sexual patterns frequently use it as a means of seducing others or of promoting conditions favorable for their deviant sexual behavior

Dependence on cocaine differs from morphine addiction in several important respects. With cocaine, there are no severe withdrawal symptoms when dosage stops Tolerance is not increased and there is no specific physical craving for the drug. Consequently, it is not strictly accurate to speak of the use of cocaine as *drug addiction* The individual may become psychologically habituated to it and dependent upon its use, but he does not become addicted in the sense of being physiologically dependent upon it

With psychological dependence on cocaine, as with addiction to opiates, there is often a centering of behavior around procurement, with loss of social approval and self-respect, and often with immoral sexual behavior. The following case shows this pattern.

The patient was a strikingly pretty, intelligent girl of 19 who had divorced her husband two years previously She had married at the age of 16 and stated that she was terribly in love with her husband but that he turned out to be cruel and brutal to her He would frequently take her to bars, where he would force her to drink while he spent the evening criticizing and berating her for no apparent reason On several occasions he tried to force her to have sexual relations with his acquaintances under threat of bodily injury.

After six months of marriage she became pregnant Her husband, who did not wish to have any children, flew into a rage He accused her of betraying him with other men, and hit her several times, finally knocking her into a stove with such force that she had to be hospitalized and eventually had a miscarriage

The girl was too ashamed of her marriage failure (her parents had violently opposed the marriage and she had left home against their will) to return to her home She moved away from her husband and got a job as a barmaid in the same

* Cocaine was apparently discovered by the natives of Peru and Bolivia, who for centuries have chewed the leaves of the cocoa plant for stimulation to increase endurance

bar where her husband had been accustomed to taking her. She was severely depressed, and several of his friends insisted on buying her drinks to cheer her up. This process continued for almost a year, during which she drank excessively but managed to hold her job.

Following this, she met a man in the bar where she worked who introduced her to cocaine, assuring her that it would cheer her up and get rid of her blues. At this time she was still feeling very depressed and sorry for herself and she thought she would try it out. She states that it both "hopped me up and gave me a feeling of peace and contentment." For a period of several months she purchased her supplies of cocaine from this same man until she became ill with appendicitis and was unable to pay the stiff price which he asked. Following an appendectomy, she was induced to share his apartment as a means of defraying her expenses and insuring the supply of cocaine which she had now become heavily dependent upon psychologically. She stated that she felt she could not work without it. During this period she had sexual relations with the man although she considered it immoral and had severe guilt feelings about it.

This pattern continued for several months until her "roommate" upped his prices on the cocaine on the excuse that it was getting more difficult to obtain and suggested to her that she might be able to earn enough money to pay for it if she was not so prudish about whom she slept with. At this time the full significance of what her behavior was leading to seems to have dawned upon her and she came voluntarily for psychiatric assistance.

Effects of marijuana. With the increasing amount of publicity attendant upon the use of marijuana, it seems appropriate to include it briefly in our discussion. As with cocaine, the use of marijuana does not involve increased tolerance or withdrawal symptoms or the setting up of a specific physical craving.

Marijuana is an intoxicant which temporarily produces a euphoric state involving increased self-confidence and a pleasant feeling of relaxation, often with a sensation of drifting and floating away. Efficiency, both intellectual and motor, tends to be decreased, and time perception and intellectual and moral judgment may be impaired. Under the influence of marijuana the individual is frequently inclined to talk too much. It has often been stated that marijuana has a marked stimulating effect upon sexual processes, but apparently this aspect has been greatly exaggerated. The increased sexual activity which may take place under marijuana intoxication is apparently based primarily on a lowering of moral inhibitions and on increased feelings of self-confidence, which make the individual feel that the opposite sex is powerless to resist his charms. As a result, sexual advances may take place under conditions in which they might not otherwise occur (Charen and Perelman[0]).

The increase in feelings of adequacy probably accounts, also, for many of the incidents of reckless driving and other antisocial episodes in which some users of marijuana become involved. Similarly, occasional musicians resort to marijuana as a means of reducing monotony and improving their rhythm and speed. Although such individuals report that they feel they can play anything perfectly when so stimulated, their efficiency is actually reduced.

Marijuana, even when used over a long period of time, seems to have no harmful physical aftereffects in and of itself. However, the expense of maintaining a supply of the drug and the antisocial conditions under which such supplies are obtained may lead to an inadequate diet and to undesirable changes in ethical values. In many cases, individuals have a low tolerance to marijuana, with the result that they may manifest severely disturbed behavior akin to pathological intoxication in alcoholism. This may even include the precipitation of an acute psychotic reaction. There are no reliable statistics on the use of marijuana, but it is probably more widespread than is generally suspected and is apparently increasing.

DYNAMICS

Only a small number of persons suffer from drug addiction per se Usually it is only a symptom of a larger pattern of personality maladjustment or ill-health which might have taken the form of alcoholism or hysterical illness symptoms or other abnormal reaction patterns. There are several typical dynamic patterns in drug addiction, depending on the type of personality or personality disorder involved. The following fourfold classification of drug addicts will be convenient for our present discussion (Felix[9])

1. Normal individuals accidentally addicted.
2. Addiction associated with psychoneuroses of all types.
3. Addiction associated with psychoses
4. Addiction associated with character disorders, particularly antisocial (psychopathic) personalities.

1. Normal individuals accidentally addicted. It has been estimated that less than 5 per cent of the drug-addict population in this country are normal individuals accidentally addicted, often as a result of the use of narcotic drugs for medical reasons (Kolb and Ossenfort[17]) In such cases the drug has been administered over a sufficiently long period of time at sufficiently frequent intervals to build up physical dependence. Included here also are many individuals entrusted with the use of narcotics, such as doctors and nurses, who are tempted by curiosity to try out the drug and in a short time find themselves physically dependent upon it without quite understanding how it all came about But these patients get little or no emotional satisfaction from the use of the drug; they are not psychologically dependent upon its use as a means of escaping unpleasant reality, and have no desire to continue its use except for physical reasons. Once the physical dependence is broken, they feel no need for the drug, for such individuals are able to face their problems without pharmacological assistance

2. Addiction among psychoneurotics. These individuals are similar to those who turn to alcohol as a way out of their difficulties. Here the use of drugs is a symptom of mental illness plus an accident—the introduction to a narcotic drug Narcotic addiction in such cases is a symptom of social inadequacy and a form of escape. The narcotic agent has enabled the individual to run away from anxiety and unpleasant reality by centering his life around a pleasant dream world. He becomes increasingly dependent psychologically on the use of the drug as a means of adjusting to life's frustrations and problems This psychological dependency is coupled with physical dependency in the case of the opiates. It is possible that in some cases drug addiction, like alcoholism, makes possible a marginal adjustment to life's frustration, and that the alternative would be further decompensation, resulting in a psychosis

3. Addiction associated with psychosis. In the relatively rare cases of psychotic addicts the psychosis apparently has lowered adaptive controls, opening the way for excessive use of alcohol or drugs or for other types of aberrant behavior

4. Addiction associated with antisocial psychopathic personality. These cases usually reveal a picture of marginal adjustment in which the individual has stayed out of major difficulties but is addicted to the breaking of social customs and cannot delay the satisfactions of his impulses. Also, such individuals are constantly on the lookout for new and different sensations and pleasures. Sooner or later they encounter narcotics, and from then on, the building up of physical and psychological dependency is similar to that in other addicts. Apparently the majority of drug addicts fall in this group (Pescor[20]).

Such individuals take to drug addiction as they do to alcoholic excesses, crime, lying, aberrant sexual behavior, and other antisocial and irregular behavior patterns In most cases addicts are not actively antisocial before addiction but become so with the illegal posses-

sion of the drug and with the illegal methods those of marginal income have to use to procure it (Pescor[29])

In a study of 100 male and 100 female patients admitted to the United States Public Health Service Hospital, Lexington, Kentucky, for the treatment of narcotic-drug addiction, Pescor[28] found that the typical adult male patient would be a 42-year-old white adult who had violated some federal law—usually for the illegal sale of narcotic drugs—and who had been given a definite sentence, thus fixing the period of treatment for his drug addiction He would come from a city of 250,000 or more, be of Protestant faith, with an eighth-grade education, and would have made a marginal economic and occupational adjustment, usually as a craftsman He would have one child, but would be separated from his wife and contribute little to their support. He would have become addicted to the use of morphine at the age of about 27 through curiosity and undesirable associates He would reveal no history of delinquency prior to addiction, but after addiction he would have a total of eight arrests, usually involving offenses against property as well as violations of the narcotics laws The property offenses would usually be stealing in order to supply himself with funds for the purchase of his drugs His family history would be positive for criminalism and alcoholism He would have at least two previous voluntary attempts at cure and at least three enforced cures for his addiction The longest period of abstinence after any of these cures would be about 21 months.

The typical female patient would be a 43-year-old white patient who sought treatment voluntarily. She would come from a community of 50,000 or less population, have a year of high school but no regular occupation except for her duties as a housewife. She would have only one child, and her marriage would have terminated in separation or divorce Her first addiction to morphine would have taken place at the age of 29 years and would have related to relief from some painful or distressing physical condition Her drug addiction would be confined to morphine, which she would administer subcutaneously She would show no history of prior treatment or of conflicts with the law. She would probably relapse after her course of treatment (Pescor[28]).

The relation of drugs to major crimes has frequently been emphasized in motion pictures and fiction, but police records indicate that most drug addicts are not major criminals in any sense of the word but confine themselves to small-time petty crimes, and that few of them commit crimes of violence. Usually when the drug addict is well supplied with drugs he feels too good to molest anyone and when he is not, he feels too miserable to do so It is true, however, that certain habitual criminals may become addicts or use drugs such as cocaine to assist them in performing their criminal acts. But such individuals might have used alcohol or other agents, and the use of drugs under these conditions is merely part of a larger pattern of criminal behavior, reflecting social or personal maladjustment in which the drug itself is not the primary cause of the crime

There has been much talk about the importance of marijuana in contributing to juvenile delinquency and other antisocial conditions But according to the report by the Mayor's Committee on Marijuana[20], covering the use of the drug in the city of New York, marijuana is not a determining factor in the commission of major crimes, nor is juvenile delinquency often associated with it Likewise, Bromberg and Rodgers[5] found no positive relationship between aggressive crime and marijuana either in the naval service or in civilian life They, too, concluded that marijuana usage is but an aspect of some broader picture of personality maladjustment Other investigators such as Gaskill[10] and Charen and Perelman[6] agree, but point out that drugs may be a determining factor in reducing adaptive controls in an emotionally

immature and already poorly integrated individual In such cases it must be remembered that undesirable companions or other factors might have had the same result

TREATMENT AND PROGNOSIS

Treatment for the drug addict is similar to treatment for alcoholism and involves building up the patient both physically and psychologically Opium addiction also requires a special withdrawal treatment which is primarily a medical matter and is greatly feared by the patient Adequate treatment requires hospitalization, and two major United States hospitals for the care of drug addicts are located near Fort Worth, Texas, and Lexington, Kentucky *

The importance of psychotherapy for the typical drug addict cannot be overemphasized, since permanent cure is extremely unlikely unless the patient can learn to face his problems instead of running away.

* A narcotic addict who wishes hospitalization at the United States Public Health Service Hospital at Lexington, Ky, or at Fort Worth, Tex, for treatment as a voluntary patient can write to the Surgeon General of the United States, Public Health Service, Washington, D.C, who will see that he is furnished with the necessary blanks and instructions In order to be eligible for treatment, one must be a citizen of the United States and a habitual user of opium, of cocoa leaves or their derivatives, or of Indian hemp or peyote (Parran[27])

Although many drug addicts successfully complete a hospital cure, the prognosis in drug addiction is generally unfavorable. It has been estimated that only about 25 per cent remain permanently free from the use of drugs (Pescor[30]). The prognosis is particularly unfavorable for individuals who become dependent upon drugs as a means of escaping from unpleasant reality and who undergo the cure merely to remove their tolerance so that they can continue the habit with smaller and less expensive dosages of the drug The prognosis is, of course, most favorable when the habit is acquired accidentally in connection with medical treatment and in cases where the patient sincerely wants to be cured.

PREVENTION

The prevention of drug addiction requires the teamwork of federal agencies for controlling the narcotic traffic, public education as to the dangers and consequences of drug addiction, and a change in the public opinion which now regards drug addiction as mysterious and sinful. Society's acceptance of drug addiction as a symptom of mental illness rather than as a sign of moral degeneracy and crime would be tremendously beneficial to treatment Long prison sentences and social ostracism are not conducive to rehabilitation of drug addicts

REFERENCES

The reference list includes not only the sources from which the author has drawn material, but acknowledgments of the permissions granted by authors and publishers to quote directly from their works

1 Alexander, J "Alcoholics Anonymous Freed Slaves of Drink, Now They Free Others" *Saturday Evening Post,* March 1, 1941

2 Baird, E G "Science and the Legal Responsibility of the Drunkard" *Quarterly Journal of Studies on Alcohol,* V (1945), 628-646

3 Biddle, W and Van Sickel, M *Introduction to Psychiatry* (2nd ed) New York Saunders, 1948

4 Binswanger, H "Klinische und charakterologische Untersuchunger an pathologisch Berauschten" *Zeit f ges Neurol Psychiat,* CLII (1935), 703-737

5 Bromberg, W and Rodgers, T C "Marihuana and Aggressive Crime" *American Journal of Psychiatry,* CII (1946), 825-827

6 Charen, S and Perelman, L "Personality Studies of Marihuana Addicts" *American Journal of Psychiatry,* CII (1946), 674-682

7 Duryea, Lyman C and Hirsh, Joseph "Problem Drinking, A Challenge to Psychiatry." *Mental Hygiene,* XXXII (1948), 246-252

8 Edlin, J V and Johnson, R H "The Conditioned Aversion Treatment in Chronic Alcoholics (Preliminary Report of 100 Cases)" *American Journal of Psychiatry,* CI (1945), 806-809

9 Felix, R H "An Appraisal of the Personality Types of the Addict" *American Journal of Psychiatry,* C(1944), 462-467
10 Gaskill, H S "Marihuana, An Intoxicant" *American Journal of Psychiatry,* CII(1945), 202-204
11 Glad, Donald D "Attitudes and Experience of American-Jewish and American-Irish Male Youth as Related to Differences in Adult Rates of Inebriety" *Quarterly Journal of Studies on Alcohol,* VIII(1948), 406-472
12 Goodman, Louis, and Gilman, A *The Pharmacological Basis of Therapeutics* New York Macmillan, 1941
13 Gray, Geneva and Moore, Merrill "The Incidence and Significance of Alcoholism in the History of Criminals" *American Journal of Psychiatry,* XCVIII(1941), 347-353
14 Haber, Sidney, Paley, Aaron, and Black, Arnold S "Treatment of Problem Drinkers at Winter Veterans Administration Hospital," *Bulletin of the Menninger Clinic,* 13(January, 1949), 28-30 Reprinted by permission of *Bulletin of the Menninger Clinic* and the Authors
15 Hirsh, Joseph *The Problem Drinker* New York Duell, Sloan and Pearce, 1949
16 Karnosh, Louis J and Zucker, E M *A Handbook of Psychiatry* St Louis Mosby, 1945
17 Kolb, Lawrence and Ossenfort, W F "The Treatment of Drug Addicts at the Lexington Hospital" Reprint from *The Southern Medical Journal,* XXXI(1938), 914-922
18 Landis, Carney and Cushman, J F "The Relation of National Prohibition to the Incidence of Mental Disease" *Quarterly Journal of Studies on Alcohol,* VI(1945), 527-534
19 Lawn, H J "The Study and Treatment of Alcoholism in the 5th S C Rehabilitation Center" *American Journal of Psychiatry,* CII (1946), 479-482
20 Mayor's Committee on Marihuana, New York *The Marihuana Problem in the City of New York* n d
21 Menninger, W C *Facts and Statistics of Significance for Psychiatry* The Hogg Foundation, University of Texas, 1948
22 Moore, Raymond F and Gray, M G "Drugs and Mental Disease A Review of 841 Cases" *Confin Neurol,* IV(1942), 238-270
23 Moore, Raymond F and Gray, M G "Alcoholism and the Use of Drugs" *Quarterly Journal of Studies on Alcohol,* II(1941), 271-295
24 Moros, N "The Alcoholic Personality, A Statistical Study" *Quarterly Journal of Studies on Alcohol,* III(1942), 45-49
25 Myerson, Abraham "Neurosis and Alcoholism Among the Jews" *Medical Leaves,* III (1941), 104-107
26 New York *Times,* January 6, 1950, p 1
27 Parran, Thomas "The Problem of Drug Addiction" Reprint No 2012 from *Public Health Reports,* LIII(1938), 1293-1297
28 Pescor, M J "A Comparative Statistical Study of Male and Female Drug Addicts" *American Journal of Psychiatry,* C(1944), 771-774
29 Pescor, M J "A Statistical Analysis of Clinical Records of Hospitalized Drug Addicts." Supplement 143 to *Public Health Reports* Washington, D C 1938
30 Pescor, M J "Followup Study of Treated Narcotic Drug Addicts" Supplement 170 to the *Public Health Reports* Washington, D C 1943
31 Pfeffer, A Z "Psychoses Due to Morphine" *Diseases of the Nervous System,* VIII(1947), 184-187
32 Price, G M "A Study of the Wives of 20 Alcoholics" *Quarterly Journal of Studies on Alcohol,* V(1945), 620-627
33 Research Council on the Problems of Alcohol *The Scientific Approach to the Problems of Chronic Alcoholism* New York n d
34 Roe, A , Burks, B , and Mittelman, B "Adult Adjustment of Foster Children of Alcoholic and Psychotic Parentage and the Influence of the Foster Home" Men Sect *Alcohol Studies* Yale University, 1945, No 3
35 Rotman, D B "Alcoholism" *Journal of the American Medical Association,* CXXVII (1945), 464-467
37 Schilder, P "The Psychogenesis of Alcoholism" *Quarterly Journal of Studies on Alcoholism,* II(1941), 277-292
38 Seliger, Robert V "Are Women Drinking Too Much?" *Woman's Home Companion,* September, 1946
39 Simmel, Ernst "Alcoholism and Addiction" *Psychoanalytic Quarterly,* XVII(1948), 6-31
40 Tiebout, H M "Therapeutic Mechanisms of Alcoholics Anonymous" *American Journal of Psychiatry,* C(1944), 468-473
41 *Time,* May 12, 1947
42 *Time,* September 13, 1948, pp 77-78
43 Voegtlin, W L and Lemere, F "The Treatment of Alcohol Addiction, A Review of the Literature" *Quarterly Journal of Studies on Alcohol,* II(1942), 717-803
44 Zangwill, O L "On a Peculiarity of Recognition in Three Cases of Korsakoff's Psychosis" *British Journal of Psychology,* XXXI(1941), 230-248.

CHAPTER ELEVEN

DISORDERS WITH MENTAL DEFICIENCY

Diagnosis of Mental Deficiency • Clinical Types • Mental Deficiency and Abnormal Behavior • Treatment of Mental Deficiency • Prevention of Mental Deficiency



Mental deficiency in one of identical twins (right) due to cerebral birth lesion The other twin is physically and mentally normal

In every age of history, in all cultures, in every stratum of society there are individuals who do not have the ability to manage their affairs with ordinary prudence, who are incapable of becoming economically independent, of entering into mature social relationships, of profiting from ordinary schooling. Some cannot grasp even the simplest concepts. All these things are part of what we call *mental deficiency.*

Mental deficiency is to be distinguished from both *mental retardation,* in which for some reason an individual's capacity is not being realized, and *mental deterioration,* in which there is loss of ability formerly possessed. Mental deficiency, as its name indicates, is a deficiency in capacity, a defect in actual mental equipment. Mental defectives, like other disabled or partially disabled individuals, have certain abilities and certain limits beyond which they cannot develop But although their limits are considerably below those of normal individuals, it is up to an intelligent society to utilize what potentialities these persons do have Many borderline defectives, now institutionalized and dependent on society, could with proper training have learned to adjust on a simple level in the outside world

The number of mentally deficient persons in the United States is variously estimated at between 1,500,000 and 4,500,000 individuals (Menninger[20], Farrell[10]). The second figure is based on the draft experience during World War II, when 4 5 per cent of all men examined (a total of 673,000) were rejected for mental deficiency.

Some 115,000 mental defectives are cared for in state and private institutions for the mentally deficient (Malzberg[19]). In 1948 the American Association on Mental Deficiency *Directory*[2] listed 87 state training schools and 189 private training schools for the mentally deficient. In addition, many other state,

county, and city hospitals have a considerable number of mentally deficient in their care. However, the great majority of mental defectives are cared for at home or make more or less successful adjustments in the community, usually with the aid of their families

DIAGNOSIS OF MENTAL DEFICIENCY

Since the I Q provides a rough measure of the individual's relative brightness and level of intellectual functioning, it is widely used for diagnosing mental deficiency. Most states now have laws providing that individuals with I.Q 's below 70 or 75 can be classified as mental defectives and committed to institutions for the mentally deficient Unfortunately, institutions for the mentally deficient are so desperately overcrowded in many states that a family may have to wait months or even years before the child can be admitted to state institutions, and private institutions are far beyond the means of the average family.

There has been much criticism of the practice of making diagnosis or commitment on the basis of I Q alone The criterion of social adjustment is not revealed in an I Q , and this is extremely important in the borderline group of so-called high-grade mental defectives Some individuals with I Q 's in the 60's and low 70's can support themselves and get along creditably in the community This is particularly true of those who have received the advantages of training in state or private training schools Consequently, when an individual's I Q is between 65 and 75, he may or may not need to be committed his emotional, vocational, and social adjustment should also be considered before he is classified as a mental defective and committed to an institution

If we thus assume that mental deficiency is not signified by any single trait such as intelligence but rather by an overall inability to take care of oneself as a constructive, independent member of society, a complete diagnosis of mental deficiency should be made from the viewpoint of medicine, psychology, and sociology Only such a broad approach can reveal the etiology, prognosis, and range of therapeutic and educational possibilities in a particular case.

Though the I Q needs to be supplemented by other considerations, it has enabled psychologists to set up a three-level classification of mental defectives which is helpful in indicating what sort of training can profitably be given in a given case, whether institutionalization is indicated, and what subsequent development may be expected

1 *Idiocy* is the most severe grade of mental deficiency—individuals so classified have an I Q less than 25 They are severely deficient in social development and are unable to master even the most simple tasks Sensory defects and motor handicaps are prevalent in this group, along with retarded growth, physiological anomalies, and high susceptibility to disease Useful speech, if it appears at all, usually develops only in a most rudimentary manner Unable to protect himself or adequately take care of his personal needs, the idiot is usually hospitalized. Surprisingly enough, as we shall see, most idiocy has been found not to be due to hereditary factors.

2 *Imbeciles* have I Q 's ranging from 26 to 50 They may achieve a social maturity of between 4 and 9 years Although unable to profit from formal schooling, many of them are able to protect themselves from ordinary danger and to learn simple tasks of a concrete nature If, however, any task requires initiative, abstraction, memory ability, or prolonged attention, imbeciles become confused and easily distracted They can rarely be taught to read and write, but some manage to talk with a fair command of language. They present an affable, dull, and somewhat vacuous personality picture Physically, they appear clumsy and ungainly and usually have some pronounced physical abnormality or deformity

3. *Morons* comprise the highest level of mental deficiency, with I Q 's ranging from 51 to 70 They usually develop a degree of sociability characteristic of the adolescent but with little of the normal adolescent's imagination, inventiveness, and judgment They have some initiative, but must be carefully guided because of their naiveté and irresponsibility. However, under careful supervision and sympathetic direction they can profit from elementary schooling (in some cases up to fourth or fifth grade level) and, since most of their life is guided by their habits and early training, it is important to diagnose them early and give them as much help as possible They present few physical abnormalities and may "pass" in jobs that demand little in terms of tact, discretion, and intellect.

CLINICAL TYPES

It was formerly thought that mental deficiency proper—as distinct from both mental "deterioration" associated with chronic functional psychoses and the blocking of intellectual functions by emotional conflicts—was a simple matter of heredity Now, however, two types of mental deficiency are customarily distinguished (1) deficiency due to heredity, which is referred to as *primary mental deficiency,* and (2) deficiency resulting from organic brain pathology introduced after conception, which is referred to as *secondary mental deficiency*

Actually there are probably a number of mental defectives—just how many we do not know—in whom illness or injury is superimposed on faulty heredity so that both primary and secondary deficiency are involved In fact, it is becoming increasingly evident that in many, if not most, cases diagnosed as primary mental deficiency, there is evidence also of some organic brain pathology in terms of disease, injury, or endocrine dysfunction However, the relationship of this organic pathology to the problem of whether the mental deficiency is hereditary or acquired is not yet clear.

There are many cases, too, where a "faulty" or "impoverished" strain under good circumstances may have a healthy child, but under adverse circumstances, such as poor prenatal care, malnutrition, and so on, may have a mentally deficient child. In any event, the practical difficulty in distinguishing between hereditary and acquired causes in cases of mental deficiency points up a serious need for further general study and clarification of the many factors involved.

PRIMARY (HEREDITARY, ENDOGENOUS) MENTAL DEFICIENCY

Those classified as belonging in this group include "any mental defective in whose immediate family—grandparents, parents, or siblings—there occurs one or more cases of mental defect, and in whose case history there is no evidence of brain disease or injury" (Strauss[31]) This type of mental deficiency is presumably transmitted via recessive genes in accordance with Mendelian laws of inheritance Although popular opinion regards most mental deficiency as hereditary, estimates of workers in the field vary considerably, from Tredgold's[33] 90 per cent to Lurie's[17] 10 per cent In general, most of the estimates place the probable incidence of cases of purely hereditary mental deficiency at between 10 and 40 per cent.

As we have pointed out, it has recently been shown that even cases in this category have definite, observable structural defects in the nervous system In autopsies of 35 cases which justifiably fell into this group, Benda[5] found an overwhelming number with abnormalities in differentiation of spinal cord and brain, indicating that the abnormal development took place during the early months of differentiation in prenatal life. He notes that these observations are not necessarily proof

of the genetic structure of mental deficiency; one may still argue that insufficient nutrition of the embryo, alcoholism of the mother, attempted abortion, and other factors may have had a part in the developmental disorders. However, Benda argues that there is sufficient evidence to indicate that as a clinical group, the endogenous cases are a definite class in terms of their particular physical and mental deviations, whatever the doubt concerning the precise origin of their deficiency.

Familial mental deficiency. This is the most prevalent diagnostic group of the primary, hereditary type Generally a diagnosis of familial mental deficiency is made where no organic or environmental cause can be discovered and where there is mental deficiency in the family. Although this disorder is assumed to be due to defective genes, the only evidence to support such an assumption is its tendency to run in families But as we have seen before in connection with schizophrenia, a tendency for a disorder to run in families is not sufficient proof of its hereditary origin

Amaurotic family idiocy. This is one of the few specific nervous-system diseases which are accompanied by mental deficiency as a prominent factor and are supposedly transmitted as a Mendelian recessive characteristic. As in familial mental deficiency, the genetic origin of this disorder is actually open to some question, inasmuch as the available experimental evidence to date merely shows its tendency to run in families

The disorder itself is a mental degeneration and deterioration rather than a typical mental deficiency in that the individual appears to mature and grow normally until the onset of the symptoms But it is classified as a deficiency because at present it is generally presumed to be hereditarily determined.

Infantile, juvenile, and adolescent types have been delineated in terms of differences in the age of onset. The degree and rapidity of sensory and motor deterioration, and the progressive intellectual deterioration are also somewhat different for the three groups In all three types, eye disturbances appear early, and in many cases blindness results. For the juvenile and adolescent types, speech disorders, gait disturbances, and more extreme losses of muscular power are observed.

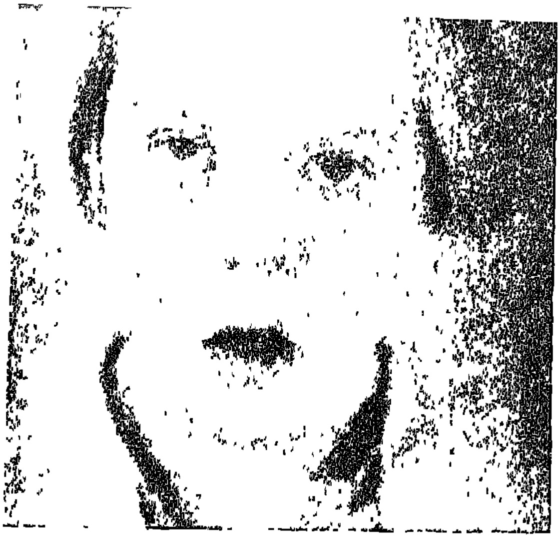
In the infantile type, the onset is usually from 3 to 6 months of age, with death occurring at about 2 years; the juvenile type usually occurs between the ages of 5 and 7, in many cases after the child has developed normally to that point, with death usually ensuing within 5 years of the onset The adolescent type takes place usually between 14 and 16 years of age, with the course of the disease somewhat less rapid, but with more severe loss of motor functions

Studies have shown chemical and structural changes in the brain and spinal cord, but as yet no medical treatment is known Psychological treatment is also of little use since the basic deficiency is caused by central-nervous-system deterioration.

SECONDARY (ACQUIRED, EXOGENOUS) MENTAL DEFICIENCY

Most of the clearly recognizable clinical types belong in this category Here the deficiency is regarded as secondary because it develops after fertilization, as a result of disease, injury, endocrine dysfunction, or any of various developmental anomalies Usually there is no history of mental deficiency in the immediate family Of the 60 or more per cent of mental defectives who fall in this category, approximately two fifths have some form of glandular disturbance; another two fifths have had a birth injury; and in the remainder there are miscellaneous causes, such as brain inflammation, concussion, syphilis, and so on (Goldstein[12])

Prenatal factors in mental deficiency. A wide range of factors can interfere with the normal development of the infant in prenatal life, with resulting impairment of mental functions. Among the more common disorders encountered here are



A mongoloid girl, ten years old. Note upward-slanting, almond-shaped eyes and thin, straight hair

1/ *Mongolism.* This group of mentally deficient, so called because their slant eyes suggest a curious resemblance to the Mongolians, represents one of the most peculiar growth disorders known to science.* Approximately 1 in every 500 births is a mongoloid, which means that about 17 mongoloid babies are born daily into American families (Benda[4]). These infants have a life expectancy of about 10 years although some of them live much longer. The total number of mongoloids now in the United States is estimated at 60,000. Mongolism accounts for some 10 to 25 per cent of all our mental defectives in infancy and is the largest among the nonhereditary groups of mental deficiency.

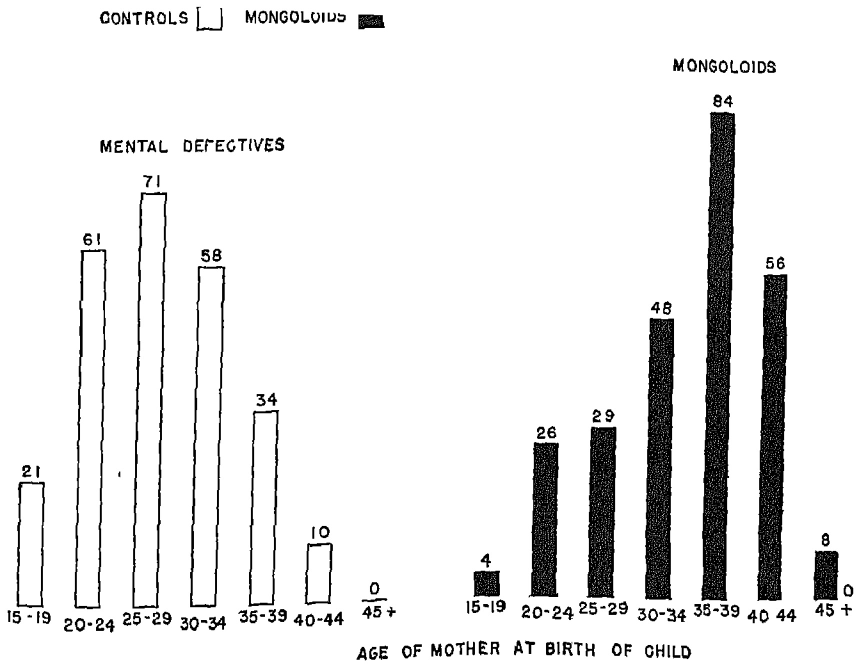
Although the term "mongolian idiot" is often used, it is misleading since these children are predominantly of an imbecile level of mental development, typically ranging from the 20's to the 50's in I.Q. Although the mongoloid rarely attains a mental level beyond that of the five-year-old, it is possible for him to learn many routine manual tasks. The mongoloid's two greatest assets are his emotional response and his mimicry. He is usually affectionate and tender, reminding one of a playful little puppy. Just as a child mimics whatever an adult does and says, the mongoloid too gets a great pleasure out of imitative activity.

The mongoloid child has almond-shaped, slanting eyes with the skin of the eyelids abnormally thick, and the distance between the eyes typically very narrow. The lips are thin and appear fissured and dry, with the tongue also showing deep fissures. The nose is flat, the hands stubby, the trunk relatively long in comparison to the shortened extremities. The hair is usually fine, silky, and straight. One other outstanding physical characteristic of the mongoloid is his deep voice, which is often helpful in making a diagnosis. Mongoloids are particularly susceptible to circulatory, gastrointestinal, and respiratory disorders, as well as to disorders of metabolism, and as we have noted, their life expectancy is extremely short.

Traditionally, the cause of mongolism was assumed to be faulty heredity. Most recent investigations, however, have failed to find any evidence for this point of view. Southwick[20], studying the records of 259 mongoloid cases, concluded that the occurrence of more than one case of mongolism in a family is very infrequent and that heredity is probably not a factor. Similarly, Benda[4] in his study of over 500 families, concludes that "hereditary factors are of no importance." (p. 248)

Based mainly on twin research, a second theory, that of germinal (plasmatic) disorder, has been advanced as the basis for mongolism. According to this theory, there is some damage to the germ plasm, possibly by gametic mutation, or the fertilization of an abnormal ovum which was not suited to produce a normal offspring. Benda, however, finds this theory highly unlikely in the light of available experimental evidence. For one thing, a spontaneous mutation is too rare an

*Benda is probably the foremost authority on mongolism and cretinism and much of the present clinical material on these disorders is based on his classic work *Mongolism and Cretinism*. For a good discussion of the psychological problems in mental deficiency, the reader is referred to Sarason[26].



In a study of 225 mothers of mongoloids, Benda[4] found 27 per cent over 40 years of age when the defective children were born, as compared with only 3 per cent of a control group of mothers of familially mentally defective children

occurrence to be responsible for a phenomenon as common as mongolism

The third etiological possibility is a pathologic condition of the mother in the beginning of pregnancy. This theory seems to be supported by several experimental findings. Bleyer[6], analyzing 2822 cases, found that more than 50 per cent of the mothers were over the age of 35 when their mongoloid child was born—more than ten years beyond the average maternal age But although age does seem to be a factor, it is also clear that the factors producing mongolism are not invariably linked with age, since mongols are also born to young mothers as well as to older ones And many older mothers, of course, have normal offspring

Benda has reported other psychosomatic factors which tend also to support the thesis of maternal pathology in mongolism The mothers giving birth to mongoloid children were found to be highly nervous and easily upset They had a high number of miscarriages, and in many cases had a continuation of menstruation through the third month of pregnancy There was also a high prematurity incidence (inability to keep a full-term pregnancy), and difficulty in becoming pregnant

Benda's greatest emphasis, however, is upon the inner secretory response of the mother to the pregnancy Fertilization and pregnancy heavily tax the maternal organism and demand a number of quick adjustments and changes in endocrine functioning Although many of the finer adjustments of the endocrine system are not yet fully understood, Benda considers it likely that in mongolism there is a glandular imbalance due either to a faulty maternal pituitary secretion or to a defective corpus luteum Presumably the pituitary, "the master gland," fails in its job as director of the endocrine system, with a resulting malfunctioning of the rest of the endocrine system that is reflected in the pathological development of the child

Treatment of mongoloids has been confined

largely to the use of thyroid extracts and X-ray therapy. These have proved of very little use, and although research is going on for a "growth" hormone to substitute for the allegedly nonfunctioning pituitary, there is little hope that the mongoloid's condition or hopes will be radically altered Benda recommends a program of extra precautions during pregnancy and delivery, particularly for women beyond 35, to guard against miscarriage and glandular or dietary deficiencies

2. *Cretinism* Cretinism provides a dramatic illustration of mental deficiency resulting from endocrine imbalance In this condition the thyroid has either failed to develop properly or has undergone degeneration or injury, and the infant suffers from a deficiency in thyroid secretion

In some geographical areas of the world where iodine is deficient in the soil, and therefore in foodstuffs grown on it, cretinism is relatively common Pregnant mothers in these areas are apt to give birth to children with defective thyroids; and where the thyroid remains undeveloped or wastes away, there is a resultant chronic thyroid deficiency and mental deficiency. Because cretinism tends to run in families in such areas, it was once thought to be a hereditary disorder but is now known to result from lack of iodine and the resulting thyroid deficiency As a result of public health measures, including the use of "iodized" salt and the early detection and correction of thyroid deficiencies, severe cases of cretinism in the United States are relatively rare, now constituting considerably less than 5 per cent of the hospitalized mental-defective population Less severe cases of thyroid deficiency encountered more commonly, however, are usually associated with birth injuries (involving bleeding into the thyroid) or with infectious diseases such as measles, whooping cough, and diphtheria. The resulting clinical picture will depend on the age at which the thyroid deficiency occurs, as well as on the degree and duration of the deficiency

Cretin girl, congenitally hypothyroid Shown aged 9, before treatment (left) and thirteen months later, after thyroid medication (right)



Typical descriptions of cretins involve cases in which there has been a severe thyroid deficiency from an early age—often before birth Such a cretin has a dwarflike, thick-set body and short, stubby extremities When standing, his height is usually just a little over three feet His shortness is accentuated by his slightly bent legs and a curvature of the spine He walks with a shuffling gait that is easily recognizable His head is large, with abundant, black, wiry hair, his eyelids are thick, giving him a sleepy appearance, his skin is dry and thickened and cold to the touch Other pronounced physical symptoms include a broad, flat nose, large and flabby ears, a protruding abdomen, and failure in sexual maturation

Cretins range in degree of mental deficiency from the low idiot to the imbecile level, although some psychologists have reported that some children with all the physical signs of cretinism have I Q's as high as 50 to 60 (Sherman[28]) In general, cretins are dwarfed mentally as well as physically; their thought processes are sluggish They show only a limited response to training and an inane, bland expression with a similar personality

Early treatment in cases of thyroid defi-

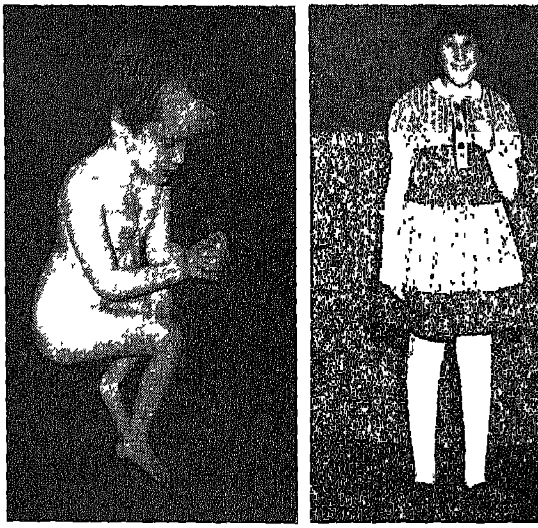
ciency can produce striking results, and there are many instances of children restored to a natural personality level by means of thyroid medication. The success of treatment will depend upon the degree and duration of deficiency prior to thyroid medication the prognosis becomes less favorable with increasing duration of the deficiency, particularly in severe cases In long-standing cases, thyroid treatment may have some ameliorating effects, but the damage to the nervous system and to general physical development is beyond repair

3. *Microcephaly* is a specific type of mental deficiency originating from a failure of the cranium to attain normal size with consequent faulty development of cerebral tissue Fortunately, this condition is extremely rare.

The chief characteristic of the microcephalic is the small head, which rarely exceeds a circumference of 17 inches as compared with the normal of around 22 inches The skull is usually rather cone-shaped, with a marked recession of the chin and forehead. Motor development is fairly good on simple tasks Intellectually, microcephalics fall into the idiot and imbecile levels with little language development and severely limited mental capacity They are inclined to be hyperactive and restless, but are good-natured and generally easy to get along with.

The precise organic pathology involved in microcephaly is not clear, although some writers on the subject emphasize the effects of meningitis or encephalitis during the fetal period (Greenfield and Wolfson[18]). These authors also report that practically all such brains show development arrested at the fourth or fifth month of fetal life No medical treatment has been developed for microcephalics, and psychological treatment is confined to simple training in personal habits

4. *Hydrocephaly* results from the accumulation of an abnormal amount of cerebrospinal fluid within the cranium, causing damage to the brain tissue and enlargement of the cranium In some cases the circumference of the skull may exceed 30 inches.



Clinical types of mental deficiency hydrocephalic idiot, aged 8 (left), microcephalic low-grade imbecile, aged 12 (right)

In a small number of cases hydrocephaly is evident at birth, and here little can be accomplished by way of treatment. More frequently the disorder begins to develop shortly after birth: there is a blocking in the ventricular system or in the subarachnoid spaces which results in the excessive accumulation of cerebrospinal fluid (Greenwood[14]) This blocking may be due to a developmental anomaly or may be traceable to some acute inflammatory brain disease such as chronic meningitis, congenital syphilis, or encephalitis Thus, contrary to popular opinion, it is not an excessive secretion of cerebrospinal fluid but the internal blockage which results in the excessive accumulation of fluid in certain brain areas

The clinical picture in hydrocephaly will depend upon the extent of neural damage that has occurred Even in severe cases where the cranium is greatly enlarged, the face size itself remains relatively normal, giving the appearance of a protruding skull such as one might expect in a race of super geniuses The degree of intellectual impairment varies, but in severe cases the patient is usually reduced to an idiot level Emotionally, hydrocephalics are usually affectionate, cheerful, and even-tempered.

Perhaps more work has been done on the

treatment of hydrocephaly than on all other cranial anomalies The most typical approach has been frequent drainage of the cerebrospinal fluid, but the fluid usually forms again in a few days and no appreciable improvement may result Other surgical methods have attempted the re-establishment of ventricular circulation, but these have not met with significant success. However, more recent surgical techniques, designed to reduce the pressure of the intraventricular fluid, have been employed more successfully (Scharff[27], Putnam[24]). Where the condition is diagnosed and treated early, some excellent results have been reported, with low mortality rates and a high ratio of survivors who are apparently growing up normally, although it is still too early for conclusive results

5. *Macrocephaly* Like the hydrocephalic, the macrocephalic has an enlarged head, but in this case it is the result of an abnormal growth in the glia cells, which form the supporting structure for the brain tissue Normal development of the brain is thus prevented and the consequence is mental deficiency The etiology of this condition has not yet been clearly delineated, and no medical techniques have been discovered for its correction This condition is extremely rare

6. *Unclassified mental deficiency.* There are a large number of cases of mental deficiency which do not belong to any of the more common clinical categories such as mongolism and cretinism and for which the etiology is obscure These cases are referred to as "unclassified" or "undifferentiated," and many are thought to result from prenatal factors.

Among the complications of pregnancy which may result in impaired mental functions are premature delivery and infectious diseases that may damage the placenta or be transmitted through the placenta to the fetus Definite damage may occur in typhoid fever, pneumonia, scarlet fever, measles, malaria, and syphilis, of these, syphilis contributes the greatest number to the ranks of the mentally deficient (Alpers and Patten[1]). We have discussed the symptoms of juvenile paresis in conjunction with congenital syphilis (acquired before birth), and we need mention here only that where the syphilitic damage to the nervous system is extensive at an early age, the intellectual functioning of the child may be severely lowered

Although the exact relationship is not understood, incompatibility in blood between mother and fetus—Rh or ABO incompatibility—results in a reaction called *maternal isoimmunization* which presumably interferes with the normal neural development of the fetus In studies of cases of undifferentiated mental deficiency as compared with mental defectives who belonged to definite, clinically recognizable types, Yannet and Lieberman[35, 36] report a significantly higher number of maternal isoimmunization cases in the undifferentiated group They conclude that blood incompatibility may be a significant factor in the etiology of mental deficiency.

Still other causes of mental deficiency occurring in intrauterine development include maternal uterine bleeding (causing oxygen deprivation in the fetal cellular tissue), acute trauma to the mother during pregnancy such as might occur through accidents, and damage to the embryonic neural structure by X-ray treatment received by the mother.

Examining 350 cases of mental defect, Patten and Mathews[22] report that 50 per cent of all cases with I Q's lower than 50 had definite signs of neurological pathology and that prenatal organic brain damage is far more prevalent than is commonly thought It is probable that as more research is done on neural evolution in intrauterine life, more will be discovered as to the organic disorders resulting from unfortunate prenatal conditions and there will be increasingly less tendency to attribute mental deficiency to hereditary transmission. Recent researches seem to be taking this direction, pointing to case after case of definite pathological damage in the central nervous system, which indicates faulty development rather than faulty heredity.

Mental deficiency resulting from birth trauma. Injuries associated with parturition are prominent causes of mental deficiency, it has been estimated that from 6 per cent to 10 per cent of mentally deficient cases are birth-injured (Doll *et al*[9]). Most prevalent among such injuries are intracranial birth lesions caused by hemorrhage during the period of labor of the mother The causes of hemorrhage at birth are most frequently prematurity and difficult labor, although improper handling of the infant, rapid delivery, and accidents are sometimes to blame.

Next to hemorrhage, asphyxia is the most important type of birth trauma which may contribute to mental deficiency. It is known that asphyxia, if continued long enough, will produce permanent damage to the ganglion cells of the cortex, resulting in impairment of mental capacity Premature separation of the placenta, cord complications, pregnancy toxemias, analgesic drugs, and delayed breathing of the newborn infant are the most common causes of asphyxia at birth.

As in cases of prenatal damage, it is difficult to present a generalized picture of children who have been injured during birth, since the type and degree of mental impairment are dependent on the nature and extent of the damage to the cortical and subcortical brain areas Often these children possess genuine ability but have difficulty in making adequate responses because of spasticity, athetosis, defective hearing and vision, and other generalized or localized motor and sensory handicaps This places a great responsibility upon physicians, psychologists, social workers, physiotherapists, teachers, and others working with these children to understand the exact nature of the disability in each case in order to help them to realize the many potentialities which they may possess It is perhaps obvious here that I.Q.'s obtained in testing these children must be carefully checked, since the test results may reflect impairments in sensorimotor functions rather than defects in intellectual capacity.

Mental deficiency from trauma or disease in infancy and early childhood. The various types of abnormal behavior associated with head injuries were discussed on pages 326 to 333 As was pointed out there, many parents bringing a child to a physician or a psychologist will tell of a blow on the head that the child received as an infant and will blame this for his retardation or misconduct It is natural for a parent to reach for any possible assurance that will relieve him of blame for either faulty hereditary transmission or faulty training of his child

Bolt[7], investigating 1000 cases at a large New York State institution, concluded that only 1 5 per cent of institutionalized mental defectives can be considered to be deficient as the result of head injury after birth But although the factor of early head injury has been popularly overemphasized, there is a recognizable pattern of behavior where it does actually play a part Here the brain injury results in severe personality disturbances in which the mental deficiency is only a small part of the whole clinical picture such children are restless, unable to adjust to new situations, easily fatigued, and unable to pay attention Their intellectual impairments are not typical of most mental deficiency but consist rather of disturbances of perception and thought organization it is difficult for them to conceptualize and integrate the elements of a problem Although sensorimotor organization is usually poor, there may be no specific physical defects or overt neurological symptoms However, there is a distinct motor disinhibition, so that they tend to touch and manipulate almost anything within reach, much as the infant will reach for a dangling object

Strauss and Werner[32] feel that the brain-injured child is a slow responder rather than a slow learner, and they advocate educational techniques using special methods and materials geared to the capabilities of these children They warn against allowing brain-injured children to deteriorate without giving them

the opportunity to adjust on at least whatever level of ability they do have. While any personality and intellectual deterioration that has occurred is considered irreversible, they have some learning ability and the teaching process must take cognizance of their particular learning process.

Recently attention has been directed to the fact that the common diseases of childhood—measles, mumps, chicken pox, influenza, and others—may produce a structural alteration in the brain tissue with consequent arrested mental development or other disorders. In a study of 128 mentally deficient children who had had whooping cough prior to their commitment, Levy and Perry[16] made a careful and thorough evaluation of all the factors that might have had a direct or indirect effect on the mental deficiency. They concluded that there was a definite causal relationship between the whooping cough and the arrested mental development that followed—the whooping cough presumably resulting in structural organic brain damage. Similar results were obtained in another study by Lurie and Levy[18].

Epidemic encephalitis and epidemic cerebrospinal meningitis are some of the other serious childhood diseases which may leave lasting damage to the brain. Epidemic encephalitis has already been discussed in Chapter 8. Not all its victims suffer from true intellectual impairment; those who do range from idiocy to slight backwardness. The degree of the deterioration seems to be dependent upon the severity of the initial illness and the age of the child at its onset. The effects are most likely to be damaging intellectually in younger children, especially those under three years of age. In older children, while mental defects may occur, behavior disorders are usually more prominent.

Epidemic cerebrospinal meningitis is caused by a micro-organism which attacks and causes an inflammation of the meninges or membranes covering the brain cortex. As in the case of encephalitis, the brain damage may impair neural functioning to varying degrees, depending upon its severity and upon the age of the child. Klein[15] estimates that 2 per cent of the institutionalized cases of mental deficiency are attributable to meningitis.

Again it may be emphasized that while postnatal brain injury and other organic factors may seriously lower the mental level of the child or the adult, it is often difficult to distinguish between the actual reduction in intellectual capacity and the interference with mental efficiency resulting from the sensory, motor, emotional, and behavior difficulties that often accompany these postnatal injuries.

MENTAL DEFICIENCY AND ABNORMAL BEHAVIOR

Often mental defectives show behavior irregularities or mental disorders in addition to their mental deficiency. It will therefore be profitable to examine the role of the mental deficiency in the total picture.

DELINQUENCY AND MENTAL DEFICIENCY

Popular opinion, based on outdated psychological findings, has it that the great majority of inmates of penal institutions are mentally defective and that mentally defective individuals are especially prone to criminal behavior. Indeed, one of the major reasons why institutionalization was first recommended for the mental defective was to protect society from his supposed "criminal propensities."

More recent psychological evidence has conclusively demonstrated, however, that inferior mentality is neither the specific cause nor the outstanding factor in crime and delinquency. Although a higher percentage of delinquent children come from the ranks of the mentally defective, particularly from those of borderline intelligence (Steinbach[30], Morris[21]), it is not the mental deficiency per se but the inability of the child to make adequate school or social adjustments that usually results in

his delinquency Undiagnosed mental defectives, living in society at large, often will have demands put upon them which they cannot possibly meet, with almost inevitable maladjustment as a result But when properly trained and cared for, mentally deficient children do not show a greater tendency toward delinquency than the general population. It is true that mentally defective children are less able to foresee the probable outcome or consequences of their behavior and are more easily led than the average child As a result, they often get into trouble unintentionally or by following the lead of others Thus it is important that these limitations be recognized and counteracted by thorough training.

Although mental deficiency does not appear to play a determining role in the actual occurrence of delinquent behavior, it does play a role in determining the *type* of delinquency a person will show Sherman[28], for example, found that among mentally deficient boys, truancy, petty stealing, and sex offenses were the most frequently noted types Among mentally deficient girls, sex offenses were the most common delinquent pattern Since even adult mental defectives do not have the ability to plan and carry out complex criminal activities, their crimes usually follow similar patterns

PSYCHOSES AND MENTAL DEFICIENCY

Popular thought has often confused psychoses and mental deficiency. We have already seen that psychotics often do show definite intellectual deterioration However, such deterioration is part of their total behavioral, affectional, and mental disorganization and should not be confused with true organic mental deficiency And even in advanced cases of paresis where the individual's intellectual level has been irreparably lowered to an imbecile level, the patient is still classified as a paretic and not as a mental defective

It is extremely difficult to test accurately the intellectual deterioration of psychotics When tested, a psychotic may "know" the answer to a question, but he may not be sufficiently interested to take the trouble to answer it He may be too concerned with his own private world to concentrate on any task, and even if his attention can be momentarily aroused, his span of attention may not be sufficiently long to give valid test results Even when a patient is tested after recovery from the mental illness, the fact of long incarceration and social isolation, and the common process of forgetting may influence the test results. In general, it can be said that the longer a psychotic condition lasts, the more deteriorated will be the intellectual level on which the person will be able to work, though with recovery and readjustment to society, he may again be able to return to his pre-psychotic level In true mental deficiency, however, the mental level is usually permanently low. Only in isolated cases has it been found possible to alleviate such deficiency to any extent by treatment or special training

Mental defectives may develop psychotic reactions or any of the other mental disorders, but in such cases the symptom picture may be different from that of persons of normal intellect. Mongoloids have been found to exhibit catatonic schizophrenic symptomatology, although the actual dynamics and mental processes involved may be somewhat different from those in catatonic schizophrenics with normal intelligence (Rollins[25]) The most common disorders shown by mental defectives are emotional outbursts, hallucinations, paranoid delusions, manic-depressive reactions, and schizophrenic reactions (Butler[8]) In general, there are fewer symptoms, and disorders are most often precipitated by minor environmental events Paranoid delusional systems are less highly systematized where there is mental deficiency, and there are more often accompanying hallucinations Spontaneous recoveries and relapses are frequent

Statistics vary as to the incidence of psychoses among mental defectives Angus[3] reports that 28 per cent of one year's admissions to a special school for mental defectives were psychotic However, in a similar study at the

Adams Foundation School, the author found only 2 such cases out of 79 admissions Probably differences in the type of defectives handled and other uncontrolled factors account for the discrepancy in statistics. In general, it would appear safe to estimate the incidence of psychoses among mental defectives at about 2 to 5 per cent In this connection it is interesting to note that 7.5 per cent of a total hospital population of psychotics were found to be mental defectives (Pearson[28]). Again, however, there is some question as to whether these figures are representative of mental hospitals in general

TREATMENT OF MENTAL DEFICIENCY

In general, there has been little success in the use of any specific therapeutic measures for lessening mental deficiency, although the results are encouraging in some instances Thyroid medication in cretinism has been discussed [illegible] has proved helpful in some head-trauma cases, and there have been hopeful results with the new methods of treating hydrocephaly. However, it may be emphasized that in every case early diagnosis is of vital importance if therapy is to be of maximum value

In long-standing cases of mental deficiency the administration of glutamic acid has resulted in an improvement in total personality performance—the children become more alert and efficient and their mental level is raised by a small but significant amount (Wallach[34] Zimmerman *et al.*[37]) However, these children are by no means cured, and when the glutamic-acid medication is discontinued, they drop back to their previous level

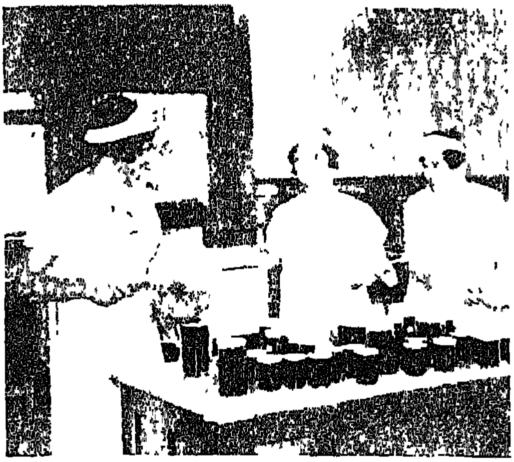
The mentally deficient child is a socio-economic, psychological, educational, and medical problem. The family, the school, the neighborhood, the legal system, community facilities—all influence his adjustment, for better or for worse. The problem becomes most crucial for those children of borderline and moron intelligence, who may have considerable sensitivity and capabilities that can be socially utilized with wise training

Disappointed parents, often insecure and guilt-ridden because of imagined responsibility for the child's condition, may demand of such a child behavior and intellectual achievement beyond his abilities, and then reject him in favor of a more fortunate sibling The frustration and lack of affection often lead to antisocial behavior and to a sense of uselessness which would not develop if the child were accepted on his level and helped to express himself, possibly in some manual skill.

Overprotective parents, trying to shield a defective child from any challenging situation, also do him an injustice by not allowing him to develop whatever capacities he may have, too often they make him overdependent and unable to display any real spontaneity and creativeness Social agencies are becoming increasingly aware of the necessity of counseling and helping parents to accept a child's shortcomings, and to realize that this is the foundation for any future work with the child

Schools, in the past few decades, have become more sensitive to their responsibility and have set up the ungraded class to allow for the physical and mental limitations of the mentally defective child Specially trained teachers utilizing special materials and techniques have already done much to bring these children to a point where they can utilize their abilities, learn the rudiments of self-sufficiency, and in many cases learn a simple occupation which gives them self-esteem and a feeling of belonging that makes them socially productive individuals.

Many communities have guidance-placement agencies which serve the mental defective, giving him occupational information, advising him of training facilities, and arranging for jobs with private industry. The mental defective is often actually more successful on routine factory jobs than the normal in-





In view of the prevalence of mental deficiency in the general population, it behooves society to do all in its power to give training commensurate with ability to the many high-grade defectives and borderline cases who may otherwise become public charges They are especially suited to routine tasks where initiative and adaptability to new situations are not required and may actually perform such tasks better than normals who more quickly become dissatisfied with monotony Vineland State Training School in New Jersey has long been known for its social, educational, and occupational training and its varied recreational opportunities Some of its activities are shown on this page



Pictures from "The Feebleminded Child" by Edgar A Doll, former director, department of research, State Training School, Vineland, New Jersey, in *Manual of Child Psychology* edited by Leonard Carmichael and published by John Wiley, 1946



dividual, particularly where extreme routinization is established and where there is little room for judgment and responsibility

Follow-up services are particularly important, for the mental defective frequently needs reassurance and continued help in his adjustment. It has been found that the failure of many such individuals on the job is due not to their intellectual deficiency but to emotional maladjustment. Probably the most significant factor in successful adjustment is the degree and kind of supervision they receive. The mentally deficient child is often acutely aware of his inadequacy and so is especially in need of kindly help and friendly direction. He should be assured of it at home, at school, on the job, or in an institution. Both individual and group psychotherapy have been found of value in helping these children to develop feelings of adequacy and self-confidence, to work out techniques for meeting their everyday problems, and to attain the security of being a valued member of a group

Institutionalization of mentally deficient children is not recommended where the child makes a satisfactory adjustment in the home and in any special training school which he may attend during the day. Because of separation from parents and other family members, institutionalization is traumatic to a child and should not be confused with educational training. Where indicated, it should take place with the least possible shock to the child. A program of foster-home placements has been developed in several cities where institutionalization is contraindicated. Of course, such placements require considerable supervision and the careful education of the foster parents with respect to the needs and limitations of the mentally deficient child.

PREVENTION OF MENTAL DEFICIENCY

The problem of preventing mental deficiency involves, inevitably, the question of the importance of hereditary factors. Twenty-seven states have laws providing for the sterilization of the mentally deficient; up to 1947, there were 23,160 cases of sterilization reported by these states, with 1007 taking place in 1946 (Gamble[11]). The results of eugenic sterilization are problematic, although its claims are often sweeping. But it will be apparent from the preceding discussion that our knowledge of hereditary factors in mental deficiency does not warrant a general application of eugenic sterilization. An increasing amount of research has focused attention on other factors, considerably lowering the percentage of cases regarded as hereditary. And even in hereditary cases which do follow Mendelian laws, the deficiency is usually apparently due to a recessive gene in one or both of the parents. Most of the carriers of mental deficiency are probably of normal intelligence themselves, and so would not be subject to sterilization.

Not until all genetic and nongenetic factors in the causation of mental deficiency have been fully explored can any scientific eugenic program be planned. For until we know exactly how important the various prenatal and postnatal environmental pressures are on both mother and child, we can never properly evaluate the significance of hereditary factors.

Probably the most important reason advanced for eugenic sterilization is that it is necessary to curtail the productivity of sex-delinquent, mentally deficient individuals. This is a real problem. Social agencies have to deal continually with pregnant girls of borderline intelligence, who have little or no ability to foresee the consequences of their sexual activity. Their children have little chance for healthy, normal adjustment; their homes are insecure and inadequate. It is these children who are most easily disposed to become retarded, emotionally unstable, and delinquent, with no psychological or socio-economic opportunity to become responsible individuals in the community.

The most hopeful approach to the prevention of mental deficiency at present is the increasing emphasis on safeguards, hygienic measures, and treatments during pregnancy and parturition and during the first few years of the infant's life The emotional and physical health of the prospective mother should be protected, her diet should be carefully planned against deficiencies, emotional shock which may upset normal physiological functioning should be avoided as far as possible Precautions should be taken against the possibility of birth injury, and the infant's diet should be quantified and qualified, with immediate attention to any early illness Through these measures many cases of mental deficiency which were once thought to be hereditary and inevitable can be prevented.

REFERENCES

The reference list includes not only the sources from which the author has drawn material, but acknowledgments of the permissions granted by authors and publishers to quote directly from their works

1 Alpers, Bernard J and Patten, Clarence A. "Cerebral Birth Conditions" *American Journal of the Diseases of Children,* LII(1936), 144

2. American Association on Mental Deficiency, *Directory,* 1948

3. Angus, L R "Schizophrenia and Schizoid Conditions in Students in a Special School" *American Journal of Mental Deficiency,* CIII (1948), 227-238

4 Benda, Clemens E *Mongolism and Cretinism* New York Grune and Stratton, 1949

5 Benda, Clemens, E "Ten Years Research in Mental Deficiency, A Study Based on 200 Autopsies" *American Journal of Mental Deficiency,* LI(1946), 170-185

6 Bleyer, A "The Role of Advanced Maternal Age in Causing Mongolism" *American Journal of the Diseases of Children,* LV(1938), 79-92

7. Bolt, W H "Postnatal Trauma as an Etiological Factor in Mental Deficiency" *American Journal of Mental Deficiency,* LIII(1948), 247-267

8 Butler, F O. "Psychosis in the Mentally Defective" *California and Western Medicine,* XLVI(1937), 84-89

9 Doll, Edgar A , Phelps, W N , and Melcher, R T *Mental Deficiency Due to Birth Injuries* New York· Macmillan, 1932

10 Farrell, Malcolm J "The Need for Research in Mental Deficiency" *Diseases of the Nervous System,* VIII(1947), 118-122

11 Gamble, Clarence J "Sterilization of the Mentally Deficient in 1946" *American Journal of Mental Deficiency,* LII(1948), 375-378.

12 Goldstein, Irwin "Implications of Mental Deficiency" *American Journal of Mental Deficiency,* LIII(1948), 207-226

13 Greenfield, J C and Wolfson, J M "Microcephalia Vera" *Archives of Neurology and Psychiatry,* XXXIII(1935), 1296-1316

14 Greenwood, James "Hydrocephalus Classification and Diagnosis" *Diseases of the Nervous System,* VII(1946), 209-211

15 Klein, D B *Mental Hygiene* New York Henry Holt, 1944

16 Levy, Sol and Perry, H A "Pertussis as a Cause of Mental Deficiency" *American Journal of Mental Deficiency,* LII(1948), 217-226

17 Lurie, L A "The Medical Concept of Feeblemindedness" *American Journal of Mental Deficiency,* L(1946), 512-515

18 Lurie, L A and Levy, S "Personality Changes and Behavior Disorders of Children Following Pertussis" *Journal of the American Medical Association,* CXX(1942), 890-894

19 Malzberg, Benjamin "A World Survey of Facilities for the Institutional Care of Mental Defectives" *American Journal of Mental Deficiency,* LIII(1948), 119-127

20 Menninger, W C *Facts and Statistics of Significance for Psychiatry* Hogg Foundation, University of Texas, 1948

21 Morris, J V "Delinquent Defectives— a Group Study" *American Journal of Mental Deficiency,* LII(1948), 345-369

22 Patten, C A and Matthews, R A "Cerebral Birth Conditions, with Special Reference to Myelogeny" *Archives of Neurology and Psychiatry,* XXXIV(1935), 61-98

23 Pearson, G B "The Psychoses with Mental Deficiency as Viewed in a Mental Hospital Clinical Syndromes" *Proceedings of the American Association on Mental Deficiency,* XLIII (1938), 166-172

24. Putnam, T J. "Electro-coagulation of the Cho-

roid Plexus in the Treatment of Infantile Hydrocephalus" *Medical Physics,* 1944, 417-418

25 Rollins, H R "Personality in Mongolism with Special Reference to the Incidence of Catatonic Psychosis" *American Journal of Mental Deficiency,* LI(1946), 219-237

26 Sarason, S B *Psychological Problems in Mental Deficiency* New York Harper, 1949

27. Scharff, J E "Nonobstructive Hydrocephalus Treatment by Endoscopic Cauterization of the Choroid Plexus" *American Journal of Diseases of Children,* LIII(1942), 297-334

28 Sherman, M *Intelligence and Its Deviations* New York Ronald Press, 1945

29 Southwick, W E "Time and Stages in Development at Which Factors Operate to Produce Mongolism" *American Journal of Diseases of Children,* LXVII(1939), 68-89

30. Steinbach, A A "Intelligence and Juvenile Delinquency" *Elementary School Journal,* XXXIV(1934), 691-697

31 Strauss, A A "Typology in Mental Deficiency Its Clinical, Psychological and Educational Complications" *Proceedings of American Association of Mental Deficiency,* XLIV, 85-90

32 Strauss, A A and Werner, H "The Mental Organization of the Brain Injured Mentally Defective Child" *American Journal of Psychiatry, XCVII*(1941), 1195-1203

33. Tredgold, A F *Mental Deficiency* New York Williams and Wilkins, 1947

34 Wallach, H A "Biochemical Consideration of Mental Deficiency The Role of Glutamic Acid" *American Journal of Mental Deficiency,* LII(1948), 305-313

35 Yannet, Herman and Lieberman, R "Further Studies on ABO Isoimmunization Secretor Status and Mental Deficiency" *American Journal of Mental Deficiency,* LII(1948), 314-317

36 Yannet, Herman and Lieberman, R "The Rh Factor in the Etiology of Mental Deficiency" *Journal of the American Medical Association,* XLIX(1944), 133-137

37 Zimmerman, Frederic T, Burgemeister, Bessie B, and Putnam, Tracy J "The Effect of Glutamic Acid Upon the Mental and Physical Growth of Mongols" *American Journal of Psychiatry,* CV(1949), 661-668

PART FOUR

MODERN METHODS OF DIAGNOSIS, UNDERSTANDING, TREATMENT, AND PREVENTION

CHAPTER TWELVE

DIAGNOSIS

Types and Sources of Diagnostic Information • Integration of Diagnostic Information



A Rorschach ink blot

Courtesy of Hans Huber, Publisher, Bern (Distributors for the U S , Grune and Stratton, Inc , New York)

When a patient arrives at a mental hospital or comes to an outside agency or clinic for psychiatric help, the first step is a thorough diagnosis of the case. In diagnosis we are primarily concerned with determining the precise nature of the patient's illness This means not just applying a label for the disorder, but obtaining as complete a view as possible of the symptom picture and evaluating the role of biological, psychological, and sociological factors in the etiology and dynamics of the disorder.

Since patients may require prolonged hospitalization or may be discharged and readmitted to a hospital several times over a period of years, they may accumulate a case record of considerable proportions. Although this requires a large amount of paper work, it is of great value in evaluating the effectiveness of the diagnostic and treatment procedures of the hospital and for research purposes

To keep a record of the diagnostic information which is obtained, as well as the subsequent progress of the patient, psychiatric agencies use case-history or case-record forms Such a form usually includes entries for.

I Identifying data (name, address, age)
II Nature of problem
III Personal history
IV Medical evaluation
V Psychological evaluation
VI Sociological evaluation
VII Diagnosis or classification
VIII Treatment
IX Discharge data
X Follow-up

We have already suggested that there are several important objectives associated with the accumulation of diagnostic information These might be summarized as follows:

1 To obtain a summary view of the symptom picture
2. To determine the dynamics and etiology of the disorder
3. To classify the patient
4 To provide a rational basis for therapy
5 To give a partial basis for prognosis

The objectives of diagnosis will, of course, vary somewhat with the particular agency, the type of patient, and various other considerations. If the purpose is to determine whether or not the individual should be committed to an institution, it is the symptom picture which the clinician is primarily interested in clarifying. Or, after a period of therapy, it may seem advisable to do diagnostic testing in order to determine how much progress has been made, as a basis for planning subsequent treatment. In cases where a mental disorder has apparently been brought on by conditions for which an employer is legally responsible (as in the case of some toxic disorders) diagnostic techniques may be used primarily for determining the degree of incapacity.

It will thus be readily apparent that classification of the patient—fitting him into some diagnostic category such as *schizophrenia*—is only one of the major purposes of diagnosis. As a matter of fact, classifications are often difficult to make, not infrequently incorrect, and sometimes misleading. They are extremely useful, however, in making it possible for us to evaluate the effectiveness of a particular type of therapy with a particular type of patient, since it insures that all those talking about "paranoids," for example, are talking about patients with roughly the same type of disorder. Needless to say, without some standard, generally agreed-on classification procedure, it would be impossible for the workers in one hospital to make use of the findings in another hospital and our progress in the understanding and treatment of mental disorders would be very much slower.

TYPES AND SOURCES OF DIAGNOSTIC INFORMATION

Modern diagnosis involves evaluation from several points of view and is achieved through the coordinated activities of a "psychiatric team" consisting of a psychiatrist, a clinical psychologist, a psychiatric social worker, and such other specialized personnel as conditions warrant. Such a team is designed to yield the following types of information.

1. *Medical data:* This includes a general picture of the patient's present physical state, with emphasis on any pathological conditions which may be causative factors in his illness. The data are obtained by means of thorough medical and neurological examination.

2. *Psychological data.* This includes a picture of the patient's symptoms and complaints, intellectual capacity, conflicts, and general personality organization. The data are obtained through interviews with the patient, observation of the patient, and diagnostic psychological tests.

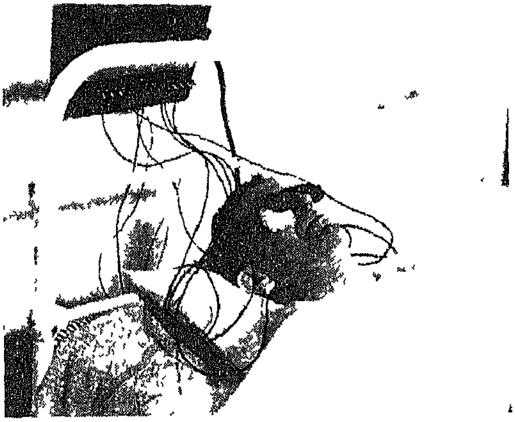
3. *Sociological data.* This includes information concerning the patient's home condition, marital, occupational, and social adjustment; financial difficulties; and general life situation. The data are obtained primarily by the psychiatric social worker.

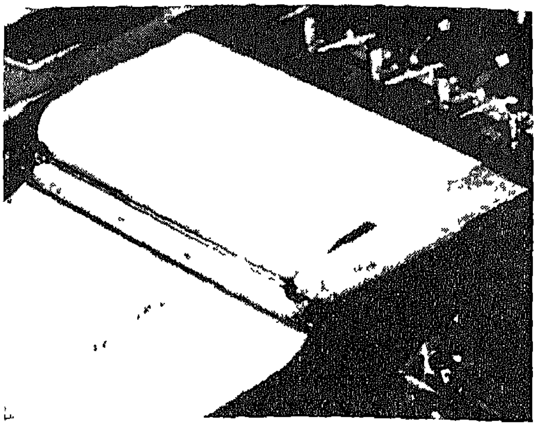
4. *Historical data.* This includes the patient's developmental, health, school, occupational, and social history, and pertinent facts about his family history, such as the incidence of mental illness. The data are usually obtained from the referral agency or persons, the patient, and the psychiatric social worker.

The comprehensiveness of the diagnostic evaluation will, of course, vary with the needs of the particular case and the facilities of the treatment agency. For each of the four types of evaluation there are several procedures which may be used—these will be our concern throughout the present chapter.

THE MEDICAL EVALUATION

We have seen that a wide range of organic pathology may be associated with mental illness, and the primary purpose of the physical and neurological examination is to detect any such conditions which may have a bear-





ing on the present illness The examination itself is a highly specialized procedure which is handled by the psychiatrist and other medical specialists It includes an evaluation of metabolic functions, cardiac functions, blood and spinal-fluid tests for syphilis, and reflex or other tests for brain tumors and other pathology of the nervous system These findings serve as the basis for improving the general physical health of the patient and for planning any necessary medical therapy.

The following items, taken from a medical examination form, illustrate the type of information that is obtained here·

Physical examination

- Blood pressure
- Heart
- Lungs
- Abdomen
- Glands

Neurological examination

- Pupils
- Gait
- Reflexes
- Sensations
- EEG

One rather specialized medical technique that is commonly used and referred to in diagnosis is electroencephalography This involves the recording of the minute electrical charges or "brain waves" which accompany the metabolic activities of the brain By means of electrodes placed over different areas of the brain the functioning of these areas may be investigated Depending upon the particular brain area involved, these tracings are referred to as *occipital EEG*, *frontal EEG*, and

Electroencephalography in Diagnosis

With the patient sitting or reclining and his head stationary (above, left), wires are placed at the points desired The tiny electrical currents are recorded on a moving paper (right) Here the waves of several brain areas are being recorded at the same time

Studies of brain waves of mental patients often have had inconsistent and controversial results In general, slow, irregular waves or rapid, jagged ones seem indicative of abnormality

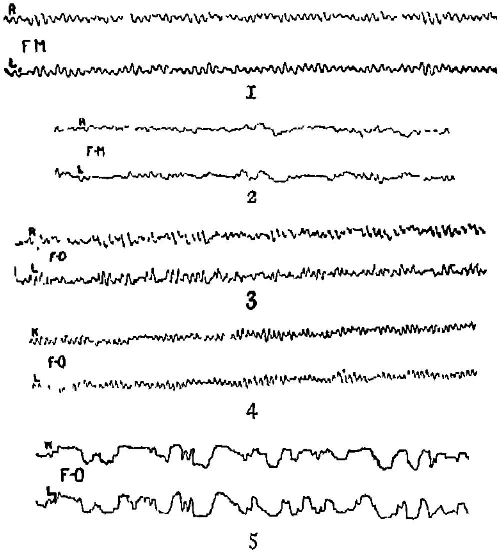
Hoch and Kubis[9] have found a relationship between the EEG tracings and the clinical picture in cases of general paresis, senile psychoses, cerebral arteriosclerosis, and alcoholic psychoses of the Korsakoff type, although this relationship is by no means an absolute one, and often the EEG is normal or only slightly irregular where mental derangement is severe Nor do all patients suffering from the same disorder show the same type of brain waves Note that in the tracings of two paretics (1, 2 top right), both deteriorated, the first is fairly normal, the second irregular Of the three EEG tracings of patients suffering alcohol psychoses (3, 4, 5 top right), the first two show some irregularity, but not in conformity with the degree of mental derangement such as the third displays Hoch and Kubis suggest that where the

mental disorder develops slowly, the brain may adapt to the damage, thus continuing to yield essentially normal tracings, or, as they point out, normal EEG's may indicate that any structural change is in subcortical areas

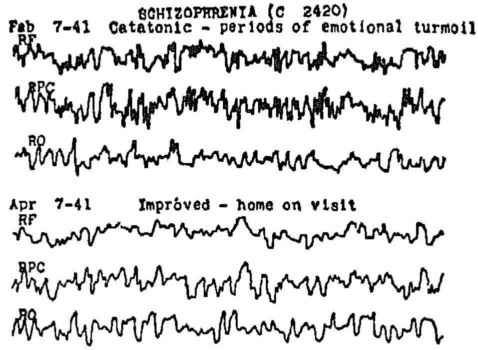
Among functional psychotics, there is considerable variation in brain-wave patterns Finley and Macfie[6] report that a high per cent of schizophrenics as a group seem to have normal tracings, though they have found several patterns frequently associated with certain clinical symptoms They emphasize the consistency of EEG tracings for a given patient and have found that when there is a definite change, it usually corresponds with a change in the clinical picture Here (center right), for example, are two sets of tracings of a 21-year-old catatonic schizophrenic, made two months apart, the second, after definite clinical improvement

Another type of diagnostic use to which EEG's may be put is shown in investigations carried out by Grinker and Serota[7] Recording at the same time both hypothalamic and cortical patterns, they found that there were marked differences between schizophrenics and non-schizophrenics in response to cold, intramuscular adrenalin, electrical hypothalamic stimulation, and verbal stimuli The schizophrenics showed little or no response, either in terms of EEG change or in the compensatory changes in body temperature or subjective fear, anxiety, restlessness, and so on, characteristic of non-schizophrenic patients Apparently the hypothalamic functions are seriously upset in the schizophrenic Grinker and Serota do not, however, attribute schizophrenia to neurological factors They conclude that "The degree of failure of the adaptive hypothalamic, homeostatic mechanism determines the degree of external frustration which becomes either physically or psychologically traumatic" (p 391) Thus they feel that the psychosis is not the result of neurological dysfunction, but of a deficient adapting mechanism The tracings at the right they describe as follows ("H" and "C" indicate hypothalamic and cortical patterns)

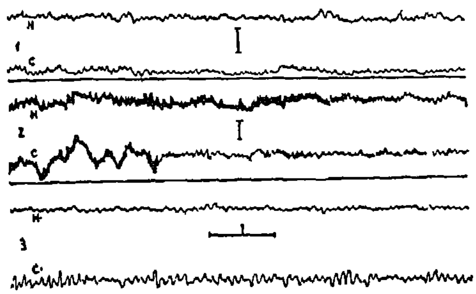
"Experiments with intramuscular adrenalin—(1) neurotic before and (2) after injection Note the marked increase in rapid activity (beta) and the increased delta swing (3) the unaltered schizophrenic after a similar adrenalin injection" (p 389)



Courtesy of Hoch and Kubis[6]



Courtesy of Finley and Macfie[6]



Courtesy of Grinker and Serota[7]

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so on Records made by placing the electrodes on the surface of the scalp are referred to as *electroencephalograms,* and those obtained by placing the electrodes in direct contact with exposed areas of the brain are called *electrograms* Electroencephalograms of four types of brain waves have been distinguished in terms of their frequency and amplitude

1 Alpha waves large, rhythmic, smooth waves averaging about ten per second

2. Beta waves: more rapid, somewhat irregular waves averaging approximately twenty-five per second.
3. Gamma waves: very low amplitude waves with frequencies of thirty-five to forty-five per second.
4. Delta waves: slow waves of relatively large amplitude having frequencies of eight or less per second.

Brain pathology is reflected in various abnormal rhythms, irregularities, and frequencies of brain-wave patterns which are called dysrhythmias. Delta waves, for example, except in sleep, are indicative of a variety of pathological conditions of the brain of both an anatomical and physiological nature. By means of electroencephalographic findings the existence, and often the nature and location, of brain tumors, lesions, and other brain pathology can be determined. Such findings are often of particular value because they reveal abnormal brain functioning which cannot be detected by other techniques.

THE PSYCHOLOGICAL EVALUATION

The psychological evaluation is based primarily upon observation of the patient, interviews with the patient, and psychological tests of several sorts. It includes an evaluation of the general behavior, capacities, and personality organization of the patient.

General behavior. A brief description of the patient's behavior (orientation, affect, hallucinations or delusions, general characteristics) is usually made on admission to the hospital or clinic. More detailed observations are then made during the course of the patient's activities on the ward and in interview situations. The purpose of keeping records of general behavior is not to determine personality dynamics, but to obtain a concise description of the salient aspects of the behavior—appearance, speech, sexual behavior, emotional behavior, destructiveness, sudden violence, orientation, delusions, hallucinations, insight, memory, attitude, judgment, and so on. To facilitate these observations, rating scales are usually used. These are so designed as to enable the recorder to indicate not only the presence or absence of a trait but also the degree of prominence of it. The following rating-scale items will serve to illustrate both the kinds of descriptive data obtained here and the five-point-scale questions commonly used.

Appearance

1) Extremely untidy and slovenly. No attention to personal hygiene unless forced. Clothes soiled with feces, food, or dirt.
2) Slovenly about appearance but will change clothes and clean up when requested.
3) Average attention to personal hygiene. Reasonably clean and neat without supervision.
4) Very tidy and clean. Spends much time in personal hygiene.
5) Excessively concerned about cleanliness. Spends excessive amount of time washing, maintaining clothes, and insuring immaculate appearance.

Sexual behavior

1) Sexually assaultive. Aggressively approaches males or females with sexual intent.
2) Sexually soliciting. Exposes genitals with sexual intent, makes overt sexual advances to other patients or staff, masturbates openly.
3) No overt sexual behavior. Not preoccupied with discussion of sexual matters.
4) Avoids sex topics. Made uneasy by discussion of sex, becomes disturbed if approached sexually by others.
5) Excessive prudishness about sex. Considers all sexual matters filthy, condemns sexual behavior in others, becomes panic-stricken if approached sexually.

In obtaining data with respect to orientation, delusions, and similar aspects of behavior, it is often helpful to ask the patient pertinent questions. For example, questions relating to orientation typically include:

	What day of the week is today?
Time	What is the date? Month? Year?
	What time is it? Morning? Afternoon?
	Where are you now?
Place	What is the name of this place?
	Where is your home?
	What is your name?
Person	Who am I?
	Where is your family?

Although much of the data concerning the patient's behavior is relatively easy to evaluate, some items can be troublesome One of the more difficult of these is the matter of delusions. The patient may present very logical arguments to prove that much of his trouble is due to the fact that others have taken advantage of him and worked against him, or he may attribute his difficulties to his state of health and cite the results of various alleged medical examinations to prove his point. In more extreme cases, as when the patient presents himself as a "great savior," the diagnosis of delusions is easier to make, although occasionally some highly improbable statements turn out to be true Burlingame[3] cites the case of a patient who was committed to a hospital because he suffered from the delusion that he had nuts and bolts in his stomach Much to everyone's surprise, an X ray of his stomach and its contents revealed not only nuts and bolts, but also screws and hairpins Although this is an extreme example, it brings home the point that we must not discredit a patient's statements or feel that all his thought and behavior are to be discounted merely because he has been classified as a mental patient and placed in an institution

Use of sodium pentothal and hypnosis. The use of sodium pentothal and of hypnosis, which we shall discuss at length in the following chapter, has proved of value not only in therapy, but also in certain cases in obtaining important diagnostic data not otherwise observable. The following sodium-pentothal interview enabled the therapist to gain a clearer view of the patient's underlying difficulties and reaction patterns than had been possible with other diagnostic techniques and to arrive at a diagnosis of schizophrenia.

"A *Summary*

This World War II veteran was admitted to our hospital as a transfer from M——. He was shot down over Germany and was in a prison camp for seven months, later was liberated by the Russians The family history is negative for neuropathic traits, neither were they elicited in his personal history He finished high school at the age of 18, following which he did odd jobs as a draftsman and an electrician's helper The social history indicates that he had always liked to be a 'showoff,' as a 'youngster' he would go to the drugstore and dance, a crowd would collect and 'pitch' coins at him After his discharge from the service in 1945, he enrolled at a university under Public Law No 346 There it was felt by the officials that he had a definite persecutory complex in which he felt that girls, faculty members, and others, particularly officials of the Veterans Administration, were 'picking on' him He was interviewed by a psychologist who found the patient to be mentally 'quick,' but unable to concentrate on any particular subject He spent his time in the classroom working on irrelevant problems and topics During classes, he would frequently get up and walk out of the room, or lie down on the floor and sleep He was found to be an annoying exhibitionist, and he would habitually come to class late, run down the hall pounding his heels and enter noisily, making some unnecessary remark He interrupted discussions with such queries as, 'When are we going to learn some trigonometry?' He was apparently unable to manage his finances and complained of having lost $500 from his bank account during the preceding three months At that time he sang and talked to himself incessantly, and, when carrying on a conversation with others, spoke in unusually loud tones. His exhibitionism was considered the most outstanding trait noticed Because of this behavior he was hospitalized at M——, where a diagnosis of

dementia praecox was made At that hospital he made a rather poor adjustment For the first few days, he was allowed freedom of the grounds, but finally he had to be placed in a room He would go to the recreation center, attract the attention of the young veterans and make long speeches concerning the treatment the veterans were receiving He was constantly making demands relative to his food, radio, and various other things At the present time, since the patient's admission to the North Little Rock Hospital, he has shown no paranoid trends He is well oriented in all spheres, and his memory for both recent and remote events is intact His psychomotor activity has increased, and because of this he has been a problem to the attendants on the ward There has been no evidence of hallucinations, delusions are denied, however, the patient does feel that the school authorities have told many untruthful stories regarding him. Insight is lacking and his judgment is grossly defective He continues to have a feeling of self-importance, and attempts to impress the examiner and the patients

"B *Pentothal Interview* Injection time—three minutes, grains—8

Q How did you like the army, R——?

A I'm a little dizzy I can't tell Good food till past Christmas I kinda feel lost I made a slide-rule, I got along with the fellows.

Q How did the Germans treat you?

A The Germans treated me fine It was an officers' prison camp

Q What's bothering you, R——?

A Our co-pilot was killed, probably by a bomb burst I bailed out right away, I was the first to go. The Germans treated me rough for a couple of days, but it didn't hurt me I didn't have any trouble Our crew was interlocked so well that they all followed They all bailed out sooner or later They respected the way I navigated We had to fill in for another airplane that fell out Bailing out made me feel nervous I didn't like to see my co-pilot killed. I felt badly about it . .

Q Do you hear any voices now?

A The voice over the radio says I'm a general. I'm nothing but a poor boy, that gripes me Everybody is trying to give me advice They are saying that I'm a millionaire. . . .

Q When did you become ill, R——?

A I was in prison camp, and got a broken jaw playing football After I got my broken jaw, my mental crack-up occurred Mentally, physically It got cold, food got scarce, and I got tired of both I was bedraggled

Q After you became ill, how did they treat you?

A They gave me good food after that I worked on my slide-rule

Q How did you get along with the boys?

A The boys noticed that I wasn't doing so well. I dreamt of getting home and completing the slide-rule It was a big object for me Got a razzing from the fellas I wasn't doing well at K P I wasn't good enough Bailing out bothered me I never knew what happened to my crew I saw Stalin in 111 Upper (a ward at our hospital) with some other Russians.

Q Did you like the show the other day?

A I liked the girls in the stage-show the other day I recognized their faces, and that I had gone out with some of them

Q Why didn't you get married, R——?

A Getting married was a personal problem to me I had lots of boy-friends when I was a little boy. I went to church, I was religious . .

Q How did your parents treat you?

A. My parents provided for me very well I never felt lonely I feel badly about my co-pilot I feel guilty because I bailed out first.

Q Where did you first meet your co-pilot?

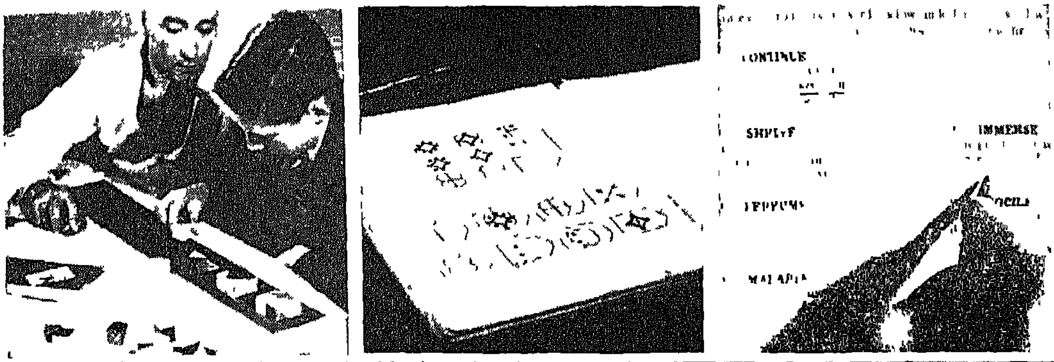
A We first met in Georgia, we became good friends. He took me home with him and introduced me to his folks Maybe I could have saved him if I hadn't bailed out first Stalin is here to get the atomic bomb

Q What do you know about atomic bombs?

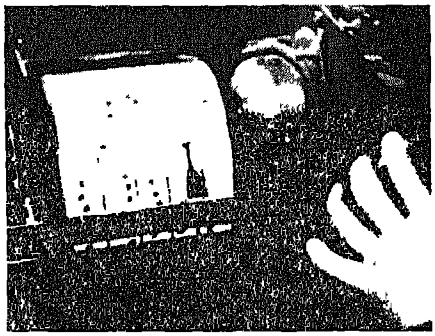
A I know about the bomb from what I read in the magazines.

"C. *Interpretations of material gained*

1. From the social service history, one would



Stills from the film *Psychiatry in Action*, produced by the Realist Film Unit



There is a growing number of tests from which the clinician may choose in his efforts to measure the various psychological dimensions of a patient Many types of psychological tests may be combined, depending on the particular patient and his needs From an individual's performance on verbal and non-verbal intelligence scales (above), tests of sensorimotor coordination (right) and various vocational aptitude tests, it is possible to gauge his capacities as well as his degree of contact with reality and his working habits, ability to concentrate, emotionality, and so on

be hesitant to make a diagnosis of schizophrenia, in fact, the most probable diagnosis would be that of a psychopathic personality Also, according to his history, this man had no hallucinations, and delusional experience was doubtful It was only under pentothal narcosis, that the true diagnosis manifested itself, that of schizophrenia " (Donahue *et al.*[4], pp 228-230)

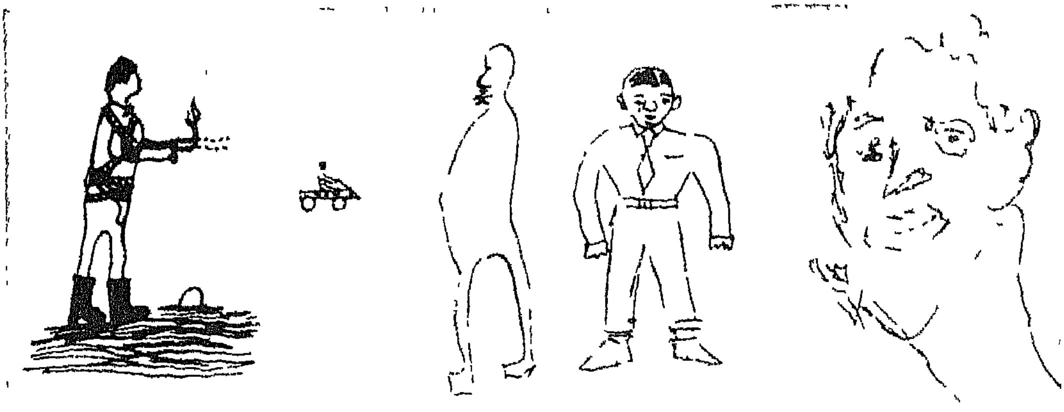
Psychological tests. Psychological tests are specialized diagnostic procedures for determining the patient's intellectual capacity, motivations, conflicts, ego defenses, environmental and self-evaluations, interests and aptitudes, and general personality organization Such tests are of particular value in revealing the psychological dynamics of the patient's illness In addition, there are special psychological tests that are utilized for the diagnosis of brain pathology

1. *Intelligence tests* There is a wide range of intelligence or capacity tests from which the clinician can select However, the most commonly used clinical instrument for the measurement of adult capacity is the Wechsler-Bellevue[10] It covers both verbal and performance materials and consists of ten sub-tests with one alternate sub-test A brief description of three of the sub-tests—two verbal and one performance—will serve to illustrate the type of functions which the Wechsler-Bellevue scale measures

GENERAL INFORMATION This sub-test consists of questions designed to tap the patient's range of information on material that the average person with average opportunity would ordinarily acquire Sample questions are·

"Who is the President of the U S.?
"Who was president before him?
"Who wrote *Hamlet?*
"What is ethnology?" (p 172)

GENERAL COMPREHENSION This sub-test consists of questions designed to measure the "common sense" of the subject and his judgment as revealed in situations described to him Sample questions are



1 2 3a 3b 4

Born[2], pointing out the intimate relationship between a patient's disturbance and the type of drawing he will execute, describes these diagnostic types as follows "From left to right (1) Aggressive drawing in which action or violence are the predominant themes (2) The inhibited drawing can be identified by its paucity in detail and its diminutive scale in relation to a large sheet of paper (3a) and (3b) The encephalitic is incapable of reproducing the body image accurately These pictures are made by two children of the age of 13 and I Q of 90, the left by an encephalitic, the right by a normal child (4) The schizophrenic personality expresses itself in drawings which appear distorted but reveal deep sensitivity to line and color and are very imaginative" (p 204) (After an exhibition arranged by the Museum of Modern Art, New York)

"What is the thing to do if you find an envelope in the street, that is sealed and addressed and has a new stamp?
"What should you do if while sitting in the movies (theatre) you were the first person to discover a fire (or see smoke and fire)?
"Why should we keep away from bad company?
"Why are laws necessary?" (p 174)

PICTURE COMPLETION. This sub-test consists of fifteen cards showing pictures, each with a part missing. The task for the subject is to indicate what is missing The test is designed to measure the individual's ability to differentiate essential elements from unessential details

Analysis of scores on the various sub-tests reveals the patient's present level of intellectual functioning and also indicates any impairment due to mental illness or brain damage. In addition, the evaluation of the actual responses of the subject, together with his behavior in the test situation, reveals much relevant diagnostic information about his personality make-up and ethical attitudes. For example, to the question "What is the thing to do if you find an envelope in the street, that is sealed, and addressed and has a new stamp?" one patient answered, "I would open it to see if there was any money in it." In other instances the subject may be unduly upset by mistakes, continually apprehensive for fear he is not doing well, or vacillating and indecisive in his responses, or he may manifest other reactions which reveal a great deal about himself.

2. *Personality tests.* There are a great many tests designed to measure various aspects of the personality organization of the patient. In considering these personality tests, it is convenient to group them into two categories—nonprojective tests and projective ones.

a) Nonprojective tests Tests of this type typically utilize the questionnaire, inventory,

and rating-scale techniques of measurement[1]. One of the major clinical nonprojective tests is the Minnesota Multiphasic Personality Inventory The *MMPI* consists of 550 test items covering topics from physical condition to moral and social attitudes. The subject checks those that apply to him. Sample items are

"__I sometimes keep on at a thing until others lose their patience with me"
"__Bad words, often terrible words, come into my mind and I cannot get rid of them"
"__I often feel as it things were not real."
"__Someone has it in for me."

Hathaway and McKinley[8], p 15

The subject's replies are rated in terms of the diagnostic category to which they belong—hypochondriasis, hysteria, asthenia, psychopathic personality, paranoia, schizophrenia, hypomania, etc.—as well as with relation to the subject's apparent masculinity-femininity The number of items that a subject marks in the same way that a schizophrenic, manic, or other type of patient would answer them indicates his tendencies in that direction

b) Projective tests Projective tests are less "structured" than nonprojective tests, relying upon various ambiguous stimuli such as ink blots, rather than upon specific test questions and answers As a result, the subject is forced to organize and interpret the text material and in the process reveals a good deal about his conflicts, level of aspiration, intellectual level, adjustive techniques, and other aspects of his personality make-up In this way projective tests place greater emphasis upon the ways in which experience and adjustive reactions are patterned by the inner attitudes and general ego structure of the subject Prominent among the many projective tests now common in clinical use are the Rorschach Test, the Thematic Apperception Test, and the Make A Picture Story Test.

The Rorschach Test is named after the Swiss psychiatrist Herman Rorschach[15], who first started experimental use of ink blots in personality diagnosis in 1911. The test consists of ten symmetrical ink-blot pictures to which the subject responds in succession The type of response elicited is indicated by the typical instructions to the subject

"People see all sorts of things in these inkblot pictures, now tell me what you see, what it might be for you, what it makes you think of" (Klopfer[10], p. 32)

The scoring and interpretation of the subject's responses require a highly skilled clinician, and in competent hands will reveal much about the subject's general personality structure—the way he deals with his inner drives, his introversive and extroversive tendencies, and so on. The following excerpts are taken from the responses of a patient to the ink blot shown below. On the basis of these and findings from several other tests he was diagnosed as an antisocial personality with strong hostility.

"This looks like two men with genital organs exposed They have had a terrible fight and blood has splashed up against the wall They have knives or sharp instruments in their hands and have just cut up a body. They have already taken out the lungs and other organs. The body is dismembered . . nothing remains but a shell the pelvic region They were fighting as to who will complete the final dismemberment . like two vultures swooping down ."



A Rorschach[15] ink blot



One of the series of pictures shown to the subject in the Thematic Apperception Test

The Thematic Apperception Test *(TAT)* was introduced in 1935 by its co-authors Morgan and Murray[12] of the Harvard Psychological Clinic It consists of a series of pictures which are presented to the subject with instructions to make up a story about each of them. Again the usual instructions accompanying the test reveal much about its nature:

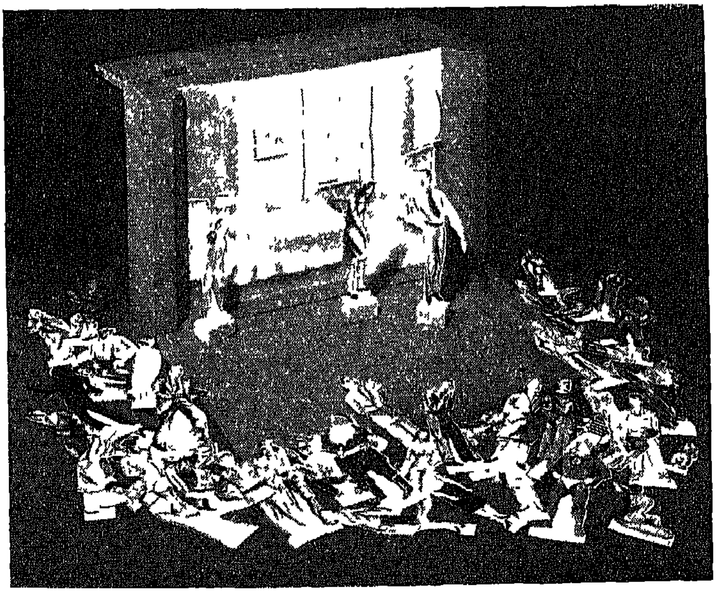
"This is a test of imagination, one form of intelligence. I am going to show you some pictures, one at a time, and your task will be to make up as dramatic a story as you can for each Tell what has led up to the event shown in the picture, describe what is happening at the moment, what the characters are feeling and thinking, and then give the outcome Speak your thoughts as they come to your mind Do you understand? Since you have fifty minutes for ten pictures, you can devote about five minutes to each story Here is the first picture" (Murray[13], p 3)

Stories collected in this way—in terms of the heroes, the types of plots, the outcomes, the characters with whom the subject identifies himself, and so on—often reveal a great deal about his conflicts, attitudes, level of aspiration, and related aspects of his personality.

The following story made up around the picture on the opposite page illustrates the type of material that may be obtained on the *TAT* and shows the actual conflict with which this patient was trying to cope.

"This old lady is quite upset because her daughter has been going out and making a tramp out of herself She is remonstrating with her daughter and warning her of the trouble she will get into if she doesn't change The old lady used to be quite pretty but her husband died, and she had to work so hard supporting herself and her daughter that it aged her before her time Since she was working such long hours she could not keep an eye on her daughter who grew up self-willed and adventurous The daughter is eager for life She wants to be gay and carefree and have fun and go out with men But her mother's continual warnings upset her She doesn't let her mother know this and she is too self-willed to let it affect her behavior. But she wishes her mother would stop bothering her and go away not really away, but just mind her own business"

In the Make A Picture Story Test *(MAPS)* there are a large number of cutout figures of various kinds—males, females, animals, legendary and fictitious figures such as Superman, and silhouettes, and twenty-two varied backdrops which form a sort of stage—living rooms, bathrooms, bedrooms, camp, street scene, cemetery, life raft, and so on Any figure can be placed on any background, and as the subject is given the different backgrounds, he selects one or more of the figures and populates the background pictures, telling a story of the situation he is depicting



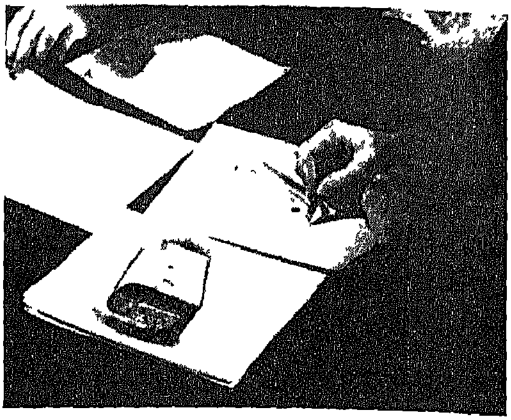
One of the stage settings and several of the cutout figures employed in the MAPS Test, together with the apparatus on which the patient has the figures act out his stories The patient uses several backgrounds in the course of the examination, making up a story for each Thus the interviewer's evaluation is based on the patient's attitudes and responses toward several types of situations The MAPS Test is often used also as a psychotherapeutic technique in combination with psychodrama based on the picture situations and stories the patient has created

The following story, told in relation to the picture below, was given by a 22-year-old patient who since childhood had had numerous sado-masochistic compulsions such as looking into the sun and putting his tongue on frozen metal, as well as strong desires to mutilate himself and other members of his family.

"Young girl walking through woods . . . a young man going in the opposite direction along a parallel path separated by thirty feet. He notices her. She fails to see him. He follows her and attempts to make advances. She is very receptive at first without realizing his exact intentions. He attempts to caress her. She struggles to free herself. He proceeds to abuse her physically inflicting severe pain. Tearing clothes from her body and attacks her. She—he treated her more roughly than he intended to and she collapses from the ordeal and dies from the attack. He realizes this immediately afterward. Conceals the body . . . Very upset and makes his way out of woods onto highway. Feeling he is being watched continuously. By whom he does not know . . . This is his first but not his last attempt. His environment and feelings are too strong for him to control at times." (Who might this be?) "That represents myself." (Fantel and Shneidman[5], pp. 7-8)



In summarizing this patient's MAPS test records Fantel and Shneidman concluded that although there was a psychotic coloring with definite paranoia, the main picture was "of a



From the film *Psychiatry in Action* produced by the Realist Film Unit

In this less well-known test, the patient is shown a series of pictures and encouraged to draw whatever comes to mind while engaged in conversation with the interviewer. Here a schizophrenic patient, shown a trunk, has drawn a coffin

severely disturbed neurotic, preoccupied with masturbatory guilt and sexual fantasies involving rape, voyeurism, and sadism . . ." (p. 8)

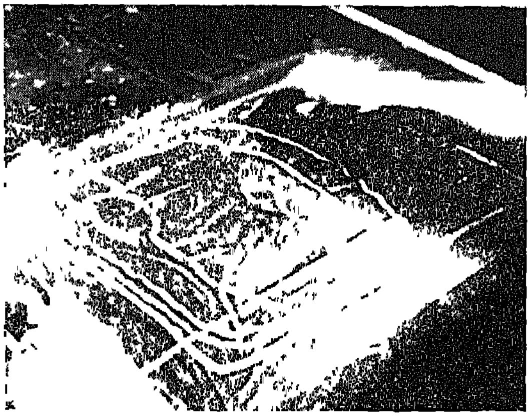
3. *Other specialized diagnostic tests.* A wide range of other psychological tests is available for clinical use to reveal the capacity, interests, aptitudes, emotional conflicts, and other aspects of the patient's personality organization. There are also several highly specialized tests which are used in the diagnosis of brain tumors and other organic brain damage.*

Typically a combination of tests is used in the psychological evaluation. This involves the selection of tests best suited to meet the needs of a particular case. Often this battery includes the Wechsler-Bellevue, *MMPI*, Rorschach, and *TAT* or *MAPS*.

It goes without saying that in contacts with a patient it is vitally important that the psychologist or clinician maintain a sympathetic and understanding attitude, designed to gain the patient's confidence and cooperation. The nature of these contacts has a direct bearing upon the accuracy and value of the psycholog-

* There are many special books and articles dealing with specialized diagnostic techniques. For a survey of the more commonly used clinical instruments, the reader is referred to Bell[1], Mursell[14], Rosenzweig[16], Shafer[17].





From the film *What's on Your Mind*, courtesy National Film Board of Canada

Fingerpainting is valuable in both diagnosis and therapy and with adults as well as children Here a neurotic patient makes a small figure (himself) and a larger figure which represents his dictatorial, much feared father.

ical evaluation Likewise, a friendly, interpersonal relationship with the tester will be of therapeutic value to the patient as well as helping to establish attitudes toward the hospital or clinic which will help in later therapy.

SOCIOLOGICAL EVALUATION

Not only are we interested in the personality dynamics of the patient, but we are also interested in his total life situation—what the stresses have been and his previous reactions and adjustments to them, and what they are at the present time Here we are concerned with the patient's past and present home, and with his marital, occupational, and general social adjustment An unhappy marriage, divorce, occupational dissatisfaction, unpleasant relations with parents, being a member of a minority, the forced interruption of his education, living in a slum area—all these factors can be of vital importance in the dynamics and etiology of his disorder. Without such sociological data concerning the patient's general life situation, any understanding of his disorder is incomplete and the planning of effective therapy may be severely handicapped. Thus, wherever possible, a psychiatric social worker visits the home and talks with members of the patient's family

The following summary of the family situation of a 23-year-old female alcoholic shows the great value of obtaining a full sociological evaluation.

The mother is the dominant figure in the family constellation, and rules the family with an iron hand She married her husband for his money, which he subsequently lost Since that time she has earned the family living and is contemptuous and scornful in her relations with him She does not sleep in the same bedroom with him and refuses to have anything to do with him physically The mother has transferred her affection to the daughter, whom she has overly protected and dominated and for whom she has ambitions which represent the vicarious gratification of her own frustrated hopes She has always made the daughter's clothes and done her best to make her a show piece She is extremely critical to the point of actual jealousy of the young men who have taken an interest in her daughter and has made it so unpleasant that most of them have stopped calling The only suitor that she encourages for her daughter is Bob ——, the son of a wealthy and socially prominent family, who is very passive and weak and resembles her husband in many respects The daughter "can't stand" this fellow, but at her mother's insistence has been going "steady" with him He is a fairly heavy drinker, and it

was through associating with him that she first started drinking about two years ago For the past six months her mother has been putting increasing pressure upon the daughter to marry Bob She points out all that she has done for her, states that she is dying of cancer (which is probably not true), and that the least her daughter can do for her is to marry the right person The daughter turned to her father for assistance, but he is completely dependent upon the mother and suggested that she "better do what mother says" The mother is unable to understand her daughter's excessive drinking but feels that her daughter has let her down and continually reminds her daughter of this

HISTORICAL DATA

Usually historical data relating to the patient's family history and educational, occupational, and social history are obtained by the psychiatric social worker Knowledge of a family history of epilepsy, mental illness, or other chronic pathology may be of value in diagnosis and additional information relating to race, nativity, and the social standards of the family may also be important.

INTEGRATION OF DIAGNOSTIC INFORMATION

The diagnostic material obtained is usually evaluated and integrated in the "staff" conference attended by the psychiatrist, the clinical psychologist, the psychiatric social worker, the nurse, the attendant, and any other personnel concerned with the care and treatment of the patient By a pooling of the various diagnostic findings, it is possible to see how far they agree with and complement each other (See front endsheet) or whether there are discrepancies that need further investigation At this time a diagnostic label (classification) is decided upon and coordinated plans for therapy worked out The findings of each member of the staff, as well as the joint recommendations, are then entered in the patient's case record, so that it is always possible to check back and see why a certain course of action was undertaken, how accurate the original diagnosis was, and how wise the recommendations were. In this way clinical theory can constantly be checked against actual results

Although we have been primarily concerned with the diagnostic evaluation of mental patients upon their entry into a hospital or upon their initial contact with a clinic or a psychiatrist, our diagnostic techniques are by no means confined to this area. Routine medical check-ups are of course of great importance in detecting and correcting early pathology and insuring physical health Similarly, psychological tests may be used to detect early unhealthy trends in personality development long before the subject's behavior becomes manifestly abnormal In addition, such tests may be used from time to time in the course of treatment to check progress and see if changes should be made Often they are used before and after electro-shock or psychosurgery to evaluate the psychological effects of these treatment procedures upon the intellectual functioning and personality organization of the patient.

Thus our diagnostic tools are our "eyes" in the difficult and complex attempt to help mental patients back toward a normal adjustment By means of them we see where we are, can plan where we want to go, and the best way to get there, and can check our progress Without these "eyes," the potential usefulness of even the best of therapeutic tools would be severely diminished

In concluding our discussion of the psychological evaluation, it may be emphasized that much relevant diagnostic material may be obtained in the course of psychotherapy. This material may be utilized as a check on the accuracy of the original diagnosis or it may be used to supplement the diagnostic material previously obtained In some instances the entire psychological evaluation may be

Prefixes and Suffixes Used in Abnormal Psychology

PREFIX OR SUFFIX	LANGUAGE	MEANING	EXAMPLE
a-	Greek	Without, deprived of	Amentia—mental deficiency
ab-	Latin	Away from	Abnormal—away from the norm
auto-	Greek	Self	Autoeroticism—self-gratification of sexual desires
cata-	Greek	Downward, destructive	Catatonic—destructive tension
dys-	Greek	Imperfect, faulty	Dysphasia—imperfect ability to use speech symbols
eu-	Greek	Good, agreeable	Euphoria—exaggerated feeling of well-being
extra-, extro-	Latin	Outside, outward	Extrovert—one whose interests lie outside of himself
hemi-	Greek	Half	Hemiplegia—paralysis of half the body
homo-	Greek	Similar	Homosexual—erotically inclined toward the same sex
hyper-	Greek	Excess	Hyperalgesia—excessive sensitivity to pain
hypo-	Greek	Insufficient	Hypokinesis—decreased motor activity
im-	Latin	Not, (antagonism)	Immobility—fixedness
-itis	Greek	Inflammation	Encephalitis—inflammation of the brain
macro-	Greek	Large, great	Macrocephalic—large-headed
mal-	Latin	Defect (of), bad, badly	Maladjustment—faulty or poor adjustment
micro-	Greek	Small	Microcephalic—small-headed
mono-	Greek	Single, unitary	Monoplegia—paralysis of one limb
para-	Greek	Aside from, disordered	Paranoia—disordered mind
-phobia	Greek	Dread, fear	Nyctophobia—fear of darkness
syn-	Greek	Together	Synopsia—associating colors with tones
uni-	Latin	Single, unitary	Uniocular—one-eyed

Adapted from Thorpe and Katz[15]

made during psychotherapy Some therapists feel that in the actual course of psychotherapy with the patient, his true personality structure and underlying difficulties will be revealed, thus making extensive testing unnecessary Since the complete psychological evaluation does require anywhere from 10 to 30 hours, this point of view cannot be summarily dismissed

Other therapists feel, however, that the psychological evaluation provides the essential basis for the planning of the most appropriate therapy, and point also to its efficacy in the early detection of pathological trends Menninger[11] well summarizes this latter point of view in his statement that

" . there have been devised psychological tests which are useful to psychiatrists just as a Wassermann test is useful to internists These tests not only help to make a definite diagnosis in doubtful cases, but they can be applied to apparently normal patients, and in such patients often reveal the presence of schizophrenic tendencies which do not show in any clinical way" (pp 102-103)

REFERENCES

The reference list includes not only the sources from which the author has drawn material, but acknowledgments of the permissions granted by authors and publishers to quote directly from their works.

1 Bell, John E *Projective Techniques* New York Longmans, Green, 1948
2. Born, Wolfgang "Artistic Behavior of the Mentally Deranged" *Ciba Symposia,* VII (1946), 207-216
3. Burlingame, Charles C "Psychiatry Becomes of Age" Institute of Living *Digest of Neurology and Psychiatry,* Series No XVI (1948), 647-655
4 Donahue, H H , Winer, M L , and Glazer, Norman M "Pentothal Sodium: An Adjunct in the Understanding of the Schizophrenic Reaction" *Psychiatric Quarterly,* XXII (1948), 221-251
5 Fantel, Ernest and Shneidman, Edwin S "Psychodrama and the Make A Picture Story (MAPS Test)" Reprinted from the *Rorschach Research Exchange and Journal of Projective Technique,* XI, Nos 2, 3, 4
6 Finley, K H and Macfie, Campbell "Electroencephalography in Schizophrenics." *American Journal of Psychiatry,* XCVIII (1941), 374-381
7 Grinker, R R and Serota, H M "Electroencephalographic Studies of Corticohypothalamic Relations in Schizophrenia" *American Journal of Psychiatry,* XCVIII (1941), 382-391
8 Hathaway, Starke R and McKinley, J Charnley *The Minnesota Multiphasic Personality Inventory* New York The Psychological Corporation Copyright, University of Minnesota, 1943
9 Hoch, Paul and Kubis, Joseph "Electroencephalographic Studies in Organic Psychoses" *American Journal of Psychiatry,* XCVIII (1941), 404-409
10 Klopfer, Bruno *The Rorschach Technique* New York World Book, 1942
11 Menninger, Karl A "Diagnosis and Treatment of Schizophrenia" *Bulletin of the Menninger Clinic,* XII (1948), 96-106
12 Morgan, C D and Murray, Henry A "A Method of Investigating Phantasies. The Thematic Apperception Test" *Archives of Neurology and Psychiatry,* XXXIV (1935), 289-306
13 Reprinted by permission of the publishers from Henry A Murray, *Thematic Apperception Test,* Cambridge, Mass Harvard University Press, 1943
14 Mursell, James L *Psychological Testing* New York Longmans, Green, 1947
15 Rorschach, Hermann *Psychodiagnostik* (1st ed) By courtesy of Hans Huber, Publisher, Bern (Distributors for the U S, Grune & Stratton, Inc , New York)
16 Rosenzweig, Saul *Psychodiagnosis.* New York Grune and Stratton, 1949
17. Schafer, Roy. *The Clinical Application of Psychological Tests* New York International Universities Press, 1948
18. Thorpe, Louis P and Katz, Barney *The Psychology of Abnormal Behavior* New York Ronald, 1948
19 Wechsler, David *The Measurement of Adult Intelligence* (3rd ed) Baltimore: Williams & Wilkins Co , 1944



Class instruction for attendants at the Milwaukee County Asylum

Photo © LOOK Magazine

CHAPTER THIRTEEN

THERAPY

Medical Therapy • Psychotherapy • Major Systematic Approaches to Psychotherapy • Sociological Therapy • Mental Hospital and Clinic

The treatment of the mental patient includes a wide range of medical, psychological, and sociological procedures It involves the coordinated teamwork of psychiatrists, clinical psychologists, psychiatric social workers, psychiatric nurses, attendants, occupational and recreational therapists, and other specialized personnel.

Although all treatment is directed toward the readjustment of the mental patient, specific aims of necessity vary somewhat with the patient and the therapeutic facilities which are available For example, in advanced paresis, where a great deal of organic brain damage has taken place, it would be relatively useless to undertake a prolonged program of psychotherapy, and too often in the case of chronic antisocial personalities, time and personnel limitations prohibit any but the most superficial psychological treatment However, within the limitations of the patient's potentialities and life situation, and the available personnel, time, and equipment, all therapy has the following aims

1. *Physical improvement* this includes the correction or alleviation of any organic pathology and the improvement of the general physical condition of the patient

2. *Psychological improvement* this includes the modification of existing ego attitudes in the direction of adequacy, independence, reality, and general inner and outer harmony

3. *Sociological improvement.* this involves the correction of any existing conditions in the life situation of the patient which make it impossible or difficult for him to achieve an adequate personality adjustment

It is inevitable in a science so new that there should still be considerable difference of opinion in theory and practice in this field Although the major "schools" have come much closer to each other in recent years there remain certain cleavages which should be understood by the student Likewise he should gain some knowledge of the many specific therapeutic aids and techniques which have been developed and the several *dimensions* of therapy, for even with the most complete agreement among practitioners, all patients would not be treated in the same way

Accordingly, the present chapter will be devoted to a consideration of the medical, psychological, and sociological treatment procedures which are currently in use, and to an appraisal of their effectiveness with different types of patients.

MEDICAL THERAPY

Medical therapy of the mental patient may, of course, embrace practically any branch of medicine, depending upon the needs of the particular patient. Sedatives may be required for excited patients, special diets for emaciated patients, brain surgery for tumor cases, and so on. However, there are certain special medical techniques which are primarily designed for psychiatric patients. Among these are (1) shock therapy, (2) narcosis therapy, (3) electro-narcosis, (4) psychosurgery, and (5) physiotherapy.

SHOCK THERAPY

One of the outstanding achievements in the treatment of psychotic patients has been the development of the so-called "shock" therapies. These have already been mentioned from time to time throughout earlier chapters. The major techniques here are insulin shock, metrazol shock, and electro-shock therapy.

Insulin shock therapy (also called *ICT*—Insulin Coma Therapy). The new era of shock therapies was introduced by the work of Sakel[37], who presented the first report of his work on insulin shock from the University of Vienna in 1933 This procedure involves the production of a prolonged coma through the reduction of the sugar content of the blood by means of large doses of insulin. As we have seen, it is of particular value in treating schizophrenic disorders.

There are variations in insulin shock procedures and we need not go into the medical rationale involved, but a general picture of the typical sequence of events may be of interest.

1. *Procedure* In large hospitals a special ward is usually set aside where the patients live during their insulin shock treatment On the morning of the first treatment, the patient is awakened early and a dosage of 20 units of insulin is given intramuscularly. The dosage is then doubled each day thereafter until a dose is reached that will induce a comatose state or until the dosage reaches 1000 units If at this point there are no signs of clinical reaction, the dosage is alternated from high to low on consecutive days, which is usually effective in overcoming the patient's insulin resistance and inducing stupor Once a comatose state has been reached the patient is usually sensitized to insulin and needs much smaller doses for the duration of the treatment The patient is said to be in a comatose state when he no longer gives evidence of recognizing stimuli applied to him, such as speech, a pinprick, or a motion to touch the eyeballs The patients are maintained in this comatose state for approximately 1½ hours and then the coma is terminated by administering a solution of dextrose. Following the termination, the patient is given a regular meal supplemented by carbohydrates and vitamins.

The insulin therapy is continued six times per week until the patient has received 20 to 50 treatments, depending upon his degree of improvement Where the patient has shown some initial improvement but has not fully recovered or where he lapses back at the end of treatment, he may be given another course of insulin injections

2. *Signs of improvement.* Immediately following the patient's emergence from the coma, there may be a "lucid interval" during which the aloof, withdrawn, delusional and suspicious patient suddenly becomes a warm, friendly, responsive, and lucid person whose psychotic symptoms are either absent or markedly diminished. This lucid interval generally persists for less than an hour on its initial appearance, gradually fading as the day goes on. For those patients who make a recovery

under insulin treatment, this lucid period following the stupor becomes increasingly longer and of better quality until the patient remains symptom free and in good contact throughout the time between treatments. In some patients, this lucid interval may never appear, or it may be of low quality followed by a relapse

Where the lucid period does appear, the psychotherapist utilizes it to establish a helpful relationship with the patient which often determines whether the improvement will be maintained and progress to recovery or whether the patient will continue to lapse back following each treatment

The degree of improvement is usually evaluated in terms of criteria such as the following:

1. Recovered Here there is a remission of symptoms, the patient seems to have good insight into his episode of mental illness, and is able to discuss his previous condition objectively and with appropriate affect

2 Improved These patients are no longer actively hallucinated or delusional, but have little insight into prior illness, and are still somewhat disturbed individuals, although they may be able to make an adjustment in the community

3 Unimproved This includes patients who either do not respond to treatment or who show some improvement but subsequently relapse

3. *Results of insulin shock* Insulin shock treatment has proved of particular value in the treatment of paranoid schizophrenia, being of lesser value in the catatonic variety and of least value in the simple and hebephrenic forms Statistics on the recovery of insulin-treated patients vary considerably, but typically some 60 to 70 per cent of the schizophrenic patients receiving a course of insulin shock treatment either recover or show improvement (Bond and Rivers[4], Kalinowsky and Hoch[20], Paster and Holtzman[33])

The following factors have been found most significant for a favorable prognosis for patients undergoing insulin shock

1. A duration of illness of not over 1 year. In general the longer the duration of the illness the less favorable the outcome

2 An acute onset of symptoms, particularly where there is a strong emotional display.

3 Precipitating factors of great intensity, such as bereavement

4 An age of between 20 and 30 Younger and older patients do not respond as well.

5 A relatively stable pre-psychotic personality the more stable the pre-psychotic personality of the patient, the more favorable the probable outcome

6 A program of psychotherapy and other rehabilitative therapy together with the insulin shock rather than insulin shock alone

The fatality rate in insulin shock treatment approximates 1 per cent. This means that about 1 patient dies out of every hundred who receive insulin shock therapy The most common complication here is the inadvertent production of a prolonged and irreversible stupor, because an individual's tolerance is somewhat variable and hence difficult to gauge accurately Insulin shock treatment should not be used where there are acute infections, severe cardiovascular disease, diabetes mellitus, pulmonary tuberculosis, or other serious organic disorders

A modification of insulin shock therapy which has received rather wide usage during and since World War II is called "sub-shock insulin therapy" Here enough insulin is given the patient to reduce his blood sugar and produce a hypoglycemic condition but not enough to produce coma. This procedure seems to be of value in quieting excited patients and in helping run-down patients to put on weight and improve their general physical condition. It does not appear to be a substitute for insulin coma in the treatment of schizophrenia, although some workers in the field have reported very encouraging results Tomlinson[42] found that in the treatment of 300 psychotics whose average duration of illness was 22 months, the method

proved very effective, with an overall discharge rate of 67 per cent He found that if there was improvement with the treatment, and if this improvement continued as long as two weeks following discontinuation of the treatment, a relapse was not likely to occur He usually gave about 60 daily treatments, the average dosage of insulin being 68 units

Metrazol convulsive therapy. In 1935, Von Meduna[20], a Budapest psychiatrist, introduced a new approach in the treatment of schizophrenic patients He had observed that there seemed to be a much lower incidence of epilepsy among schizophrenic patients than in the population as a whole, and that the schiz- [illegible] n- [illegible] ose patients who did have epilepsy Accordingly, he set out to produce artificial epileptic-like convulsions in his psychotic patients He first tried camphor and oil, but this did not work out well because he was unable to predict when the convulsion was going to occur. Sometimes the convulsions appeared in the middle of the night following the treatment and sometimes they failed to occur for two or three days. In his search for a more predictable convulsion-producing drug, Von Meduna hit upon metrazol

In metrazol therapy, the patient, who has received no breakfast, is given an intravenous injection of 3 to 5 cc of a 10 per cent solution of metrazol. A few seconds after the injection, the patient becomes pale and rigid and often makes a few movements as if he were trying to escape. He then loses consciousness and goes into a convulsive seizure which is very similar to that of grand-mal epilepsy, and lasts from 30 to 60 seconds Immediately following the convulsion, there is a brief period of confusion, often with fearfulness, and then the patient usually falls asleep On awakening he typically feels nauseated, dizzy, and fatigued, and has a mild headache A course of treatment may involve from five to thirty seizures, depending upon the improvement of the patient

Since the convulsion in metrazol therapy is very severe, various precautionary measures are taken to safeguard the patient from injury, including securing him to the bed and placing a gag in his mouth to prevent his chewing or injuring his tongue Injections of curare (Indian arrow poison) are often given to relax the patient and reduce the danger of fractures from sudden or violent muscular contractions.

Because of the high incidence of fractures as well as fatalities in metrazol treatment, and the strong feelings of fear and apprehension in the patient prior to the loss of consciousness, it was long considered a "barbaric" form of treatment Consequently with the introduction of electro-shock, which produces approximately the same therapeutic effects without many of the above disadvantages, the use of metrazol in the treatment of psychotics has been generally discontinued

Electro-shock therapy *(ECT)*. In 1938, two Italians, Cerletti and Bini[6] introduced the use of electro-shock for the artificial production of convulsive seizures

1. *Procedure* As in the case of metrazol therapy, various measures are used to safeguard the patient against injury during the convulsions Curare is ordinarily used to relax the patient and reduce the possibility of fractures, and a rubber gag is placed between his teeth to protect both his tongue and teeth He is placed on a bed which is insulated and relatively hard Electrodes are fastened to the temples or forehead. Then a current, usually within the range of 300 to 1200 milliamperes, is passed through the cortex for a period of 0 2 to 0.5 seconds. Since the electric current travels faster than the nerve impulse, the patient feels no pain The ensuing convulsions usually last from 30 to 60 seconds and are very similar to the grand-mal seizure in epilepsy There is a sudden flexion of the body, usually accompanied by a cry, followed by a tonic phase in which the patient is rigid, and then a clonic phase, with the appearance of generalized convulsions with

jerking contractions of the extremities The latter phase usually lasts about 30 seconds.

Following the convulsion, the patient remains unconscious for about 10 to 30 minutes On regaining consciousness he usually appears semi-stuporous, drowsy, and con- [illegible] ns of a headache and generalized aches and pains Occasionally patients may manifest psychomotor excitement

Typically this treatment is continued 2 to 3 times a week, although in severe manic reactions and stuporous depressions the patient may be given electro-shock treatments 2 or 3 times a day Some patients show marked improvement after 2 or 3 treatments, whereas others require an extensive course of 20 or more. The average number of treatments given is about 10 If the patient shows no improvement after 40 to 50 treatments, the electro-shock is usually discontinued

2. *Signs of improvement* As in insulin shock, the improvement may be relatively sudden and dramatic or there may be a gradual course of improvement with successive treatments Often the patient relapses between treatments, but continues to improve during the series of treatments. Again the criteria for evaluating improvement are.

1 Recovery remission of psychotic symptoms, the return of appropriate affect, and good insight into the psychotic reaction

2 Improved persistence of some residual symptoms and only superficial insight, but often with sufficient change to warrant discharge from the hospital

3. Unimproved failure to respond to electro-shock or a relapse immediately following treatment

Although electro-shock patients commonly show a post-shock period of memory defect in which they seem somewhat confused about many past events, their learning ability is not impaired, and the memory defect clears up in a short time

3. *Results of treatment* Electro-shock has



Preparing a patient for an electro-shock treatment Nurses on both sides of the bed will hold the patient while the current is convulsing her body

proved of great value in the treatment of psychotic depressions, in manic reactions, and in certain selected cases of schizophrenia A recovery rate approximately 90 per cent is obtained in manic-depressive depressions with only a short course of treatment (Malzberg[23], Paster and Holtzman[38]) Comparable figures are found for involutional melancholics although the latter usually require a longer course of treatment (Kalinowsky and Hoch[20]) Although the electro-shock treatment of manic reactions may result in a remission of symptoms, such remissions are often unstable and not as permanent as those following the treatment of depressions However, electro-shock is of great value in the reduction of the excitement even when a full remission does not occur or is not permanent

Electro-shock has also proved of great value

in schizophrenic cases evidencing an acute onset and strong emotional coloring. Remission rates here are reported to run as high as 68 per cent (Kalinowsky and Hoch[20]). However, this applies primarily to catatonics, who have a relatively good prognosis anyway For simple and hebephrenic types the prognosis is much less favorable, the remission rates being well under 10 per cent

Aside from the treatment of neurotic depressions, electro-shock has been found to be ineffective and contra-indicated in the treatment of psychoneurotics

From the standpoint of prognosis, we may conclude, then, that the outlook with electro-shock is very favorable for psychotic depressions, promising for manic reactions, and favorable for catatonic schizophrenia. Psychoses revealing strong emotional coloring and a history of acute onset in the face of definite precipitating stresses are in general the most responsive to electro-shock. As in the case of insulin shock, patients receiving psychotherapy in conjunction with the shock treatment have a far better prognosis than those receiving only shock therapy.

Fatalities are relatively rare in electro-shock—usually about 06 per cent or about 1 patient in 400 treated Apparently the most common cause of death is a cardiovascular failure although in many fatalities the exact cause of the death is not ascertainable. In some cases fractures and dislocations occur, usually resulting from severe muscular contractions at the onset of the convulsion The incidence rate here, even with curare, seems to run from 2 to 3 per cent.

Combined insulin and electro-shock. Often in cases where insulin or electro-shock prove ineffective singly, the combination of the two produces favorable results (Kalinowsky and Hoch[20], Paster and Höltzman[32, 33]) It may be re-emphasized here that shock therapy does not "cure" mental disorders. It brings the patient back to reality and results in a remission of symptoms However, the patient is likely to relapse again sooner or later unless effective psychotherapy is combined with the shock treatment

NARCOSIS THERAPY

Prolonged sleep as a treatment procedure in mental disorders was introduced by Klaesi in 1922 (Kalinowsky and Hoch[20]) It consists of using large doses of sodium amytal or similar drugs to keep the patient continuously asleep 15 or more hours per day for a period of 10 to 14 days. During World War II, this treatment was used as an emergency measure to quiet anxiety states in combat exhaustion and permit the patient to get some rest.

Since the war it has been used somewhat to quiet excited and agitated patients But although the patient may be quieted temporarily by continuous sleep, he is just as excited as ever when the effects of the drug wear off In addition, although narcosis therapy appears to be a mild technique, it is actually quite dangerous and involves a good deal of medical and nursing skill to avoid serious complications, particularly of a cardiovascular and renal nature. Therefore, since the results do not seem to justify the severity of the treatment, it has been generally replaced by electro-shock, which is far more effective

However, it may be noted that the use of sedatives for the temporary quieting of excited patients until more effective therapy can be undertaken is a common and important therapeutic adjunct

ELECTRO-NARCOSIS

A modification of electro-shock therapy has been introduced which attempts to achieve the effects of the electro-shock without the violence of the muscular convulsions The first systematic attempts to replace electro-shock by electro-narcosis were made by Frostig and his associates[18]

The method involves exposing the patient to a current of 250 milliamperes for a period of some 30 seconds This initial current produces unconsciousness and a tonic spasm which remains as long as the full current is

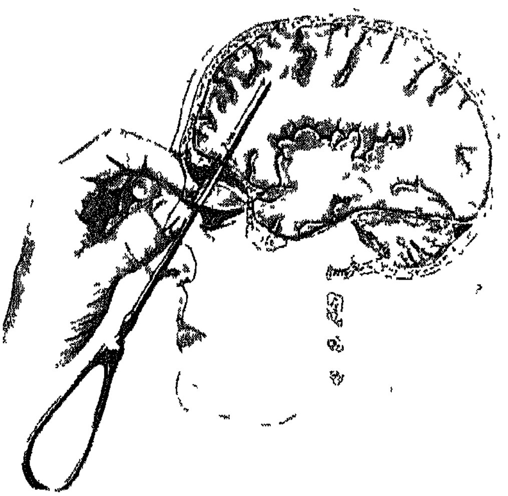
applied After the 30-second period, the current is reduced Here a few clonic movements take place but they are not at all comparable to the severe convulsions in electroshock therapy The current is then gradually increased again and after 7 minutes discontinued During this period the patient is relaxed and usually does not move

Although this method does not do away entirely with convulsions inasmuch as the tonic spasm still occurs, it does avoid the severe convulsions of the clonic phase of electro-shock However, its future use will depend upon its effectiveness in comparison with electro-shock To date, the available evidence is most encouraging, but the method requires more extensive experimental evaluation before any final conclusions can be drawn

PSYCHOSURGERY

The treatment of functional psychotic disorders by means of brain surgery was first reported in 1936 by Moniz, a former professor of neurology in the University of Lisbon (Viets[43]) Since that time thousands of operations along similar lines have been carried out with serious and prolonged types of mental disorders involving schizophrenics, involutional melancholics, antisocial personalities, manic-depressives, and even some psychoneurotics

Phantom drawing showing instrument penetrating between eyeball and upper eyelid, through orbital plate into the white matter in frontal lobe



Procedure. The surgical procedures involved are primarily medical matters and will not concern us in detail The original procedure used by Moniz consisted in cutting two openings in the skull, one on each side above the temple, and then cutting through a measured section of the nerve fibers connecting the frontal lobes with the thalamus This operation is referred to as *prefrontal lobotomy* or *leucotomy* Since 1936, modifications and improvements have been made in surgical technique, particularly by Freeman and Watts[11], who played the major role in introducing psychosurgery in the United States

One of these newer modifications is called *transorbital lobotomy* (illustrated at left) It consists of driving a sharp, slender instrument through the bony part of the eye socket into the frontal lobe of the brain The instrument is then swung through an arc of thirty degrees and withdrawn Within an hour or more, many patients so treated are able to get out of bed and perform simple activities This operation contrasts sharply with another modification of Moniz's original technique called *topectomy*, which is a formidable operation in which certain parts of the frontal lobes of the brain are actually removed One additional technique is *thalectomy*, in which an electric needle is lowered into the thalamus and a searing electric current turned on. The neurological effect of this is presumably similar to that of a lobotomy but without the irreparable damage to the frontal lobes.

Results. The post-operative effects of psychosurgery have varied widely, which might be expected in view of the differing techniques and many types of mental disorders which have been involved In some cases there have been temporary or permanent complications, including increased appetite, convulsions, aphasia, and rectal or vesical incontinence. Mortality has ranged from 1 to 4 per cent (Greenblatt and Myerson[14]).



Catatonic schizophrenic patient before psychosurgery



Same patient eight days after transorbital lobotomy

The following is a case in which transorbital lobotomy effected a quick remission of symptoms after electro-shock had proved increasingly ineffective The dramatic change in the patient's appearance is shown in the pictures above.

"Miss B S , aged 19, began about the age of 16 to experience periods of inertia and preoccupation that by May, 1945, had resulted in definite catatonia Electro-shock treatment resulted in a remission that lasted until November, 1946 Another course of shock therapy gave a remission lasting six months, but thereafter the attacks became more frequent and relatively healthy periods were marked by poor concentration and inadequate performance The girl tried to continue at work, on 'maintenance shock therapy' at the rate of one convulsion a week, but by November, 1947, was facing discharge from her position Transorbital lobotomy was performed November 10, 1947, with immediate clearing of the psychosis She returned to work within two weeks and has had no further trouble Photographs taken before and after the operation reveal the marked change in her facial expression " (Freeman[10], p 737)

The specific effects of lobotomies upon the personality of the patient vary somewhat with different surgical procedures, due to the fact that somewhat different areas and amounts of frontal-lobe tissue may be involved in the section However, there are certain generalities which seem to be in order concerning the post-lobotomy personality (Robinson *et al* [34]). If successful, the operation checks the terrific emotional tension and anxiety characteristic of most pre-operative patients, although the price for this decreased tension seems to be a loss in personality depth and a shallowness of affect. In varying degrees these patients become complacent, cheerful, and indifferent to the feelings and opinions of others They tend to live in the present with little regard for past or future. Apparently this results from a disturbance in the continuity of the self (Robinson *et al* [31]). Following the operation, the patient seems to be cut off from the past and to lack awareness of himself as he was previously It is almost as if he were largely amnesic for his past life, so that it means little to him, and fails to provide an adequate basis for his present or future behavior His general mental ability is not seri-

ously lowered, however, and over a period of time many patients develop a fairly mature post-operative personality In a general sense, the patient seems to emerge from the operation with a childish, immature personality which may or may not mature with time and experience He is apt to be more suggestible and more interested in things around him —traits which, together with a lack of emotional restraint, render him more accessible and more subject to re-education and rehabilitation (Greenblatt and Myerson[14])

Although these general personality changes are typical of what may be expected, there are many variations In some instances the emotional drive of the patient is markedly reduced so that he tends to lead a very passive, almost vegetative existence In one instance involving a homicidal patient who was chronically overactive and would impulsively attack anyone within range, the lobotomy had no apparent effect upon the patient's fundamental attitudes She still wanted to kill everyone, but now she lacked the emotional drive to carry out her inclinations She would raise her arm as if to hit the doctor, and then it would droop down in a listless fashion to her side On the other hand, the symptoms of some patients become more pronounced when they are no longer well restrained by the inhibiting control of the higher centers This is particularly true of homosexual and antisocial tendencies. Freeman and Watts[12] cite the case of an insurance salesman, with a history of several nervous breakdowns and suicidal attempts in the course of some 25 years After psychosurgery he was relieved of his nervous tension and suicidal notions, but he became so aggressive and hostile that he lost his job and his family was broken up

Conclusions as to the effectiveness of lobotomies with respect to different types of mental disorders vary considerably Moniz thought that his operations on schizophrenic patients turned out to be failures because the basic symptoms of the schizophrenics did not disappear, although there were changes in patients' ward behavior that made many of them more manageable (Viets[13]) In the light of present findings, it would appear that the latter is about all that can be expected, and reports of good and fair improvement in psychosurgery cases are for this reason often misleading For example, Strom-Olsen and his colleagues[11] use the term "much improved" to refer to those patients who show an alleviation of their worst symptoms, thus requiring less supervision and enabling them to enjoy greater freedom In the case of shock therapy, such patients would be rated as only "improved" Freeman and Watts[12] use the categories of "good," "fair," and "poor" with respect to improvement but here too, "good improvement" may include cases in which the psychotic thought content remains fundamentally unchanged although the patient's affective response to his delusions and hallucinations is markedly reduced. These writers apparently feel that the surgery paves the way for the improvement of these patients over a long period of personality redevelopment In any event they report that some 40 per cent of their series of schizophrenics show "good or fair improvement" (Yacorzynski[40]) In the treatment of involutionals they report more favorable results, some 64 per cent showing good or fair improvement (Yacorzynski[40]) Results on antisocial personalities are contradictory, some workers reporting success and others failure (Strom-Olsen *et al*[41], Ziegler[47]) Although the figures for manic-depressive reactions and pyschoneuroses appear favorable in terms of improvement, the desirability of using such drastic procedures to treat these conditions is very questionable

A great deal of controversy has centered around the justifiability of resorting to psychosurgery The antagonism to it is well summarized in the report below by the Group for the Advancement of Psychiatry[16]

" It is an operation, performed in the name of therapy, steadily advised with greater frequency not only for intractable psychoses, but

also for a wide variety of psychological disturbances. It is now being used for neuroses and in some clinics even for the treatment of war neuroses It is often done hastily, without adequate previous study, without the previous use of rational therapeutic measures and it is performed before an opportunity is afforded for possibility of spontaneous remissions It represents a mechanistic attitude toward psychiatry which is a throwback to our pre-psychodynamic days, which in itself would not be of great concern if it were successful and did not harm the patient It is a man-made, self-destructive procedure that specifically destroys several human functions which have been slowly evolved and that especially separate us from other animals If the operation is of importance as a therapeutic procedure in certain selected cases, it becomes all the more important for us to establish definite clinical indications and controls so that its usefulness will not be diluted by utilization in situations where it can do little good and much harm." (p 2)

These surgical techniques have been widely popularized in magazine articles and thousands of people each year flood the chief United States neurosurgical centers with requests for such operations. In the light of present experimental evaluations, however, it would appear that psychosurgery should be undertaken only in extreme cases which have not responded to shock, psychotherapy, and other less drastic forms of treament. The aftereffects may be especially severe where there is actual removal of the brain tissue. Here the patient's capacities are often lowered, and he may manifest many of the symptoms of brain-injured patients The range of such operations might be even further restricted in the light of Freeman and Watts'[12] emphasis on the fact that only those patients who are emotionally responsive, regardless of the type or severity of other symptoms, have a favorable prognosis Where the patient is withdrawn and relatively free of emotional tension, psychosurgery seems to be contraindicated It may be re-emphasized too that psychotherapy and other measures to insure the post-operative adjustment of the patient are of vital significance in the final outcome of the cases who do show improvement following the surgery

Other surgical procedures which have been worked out particularly for use with stomach ulcer and related "psychosomatic" disorders are *vagotomy* and *sympathectomy*. The former involves the partial cutting of the vagus nerve, and the latter the cutting of the sympathetic nerves. These operations are still in experimental stages, and it is too early to evaluate their worth It would appear again, however, that they can be justified, if at all, only in extreme cases where there has been no response to less "barbaric" forms of therapy.

PHYSIOTHERAPY

Physiotherapy includes the treatment of mental patients by means of (1) hydrotherapy, (2) electrotherapy, (3) massage

Hydrotherapy may be utilized in various ways depending upon the needs of the patient Continuous hot baths with the temperature maintained at about 100 degrees are widely used for the quieting of excited and agitated patients. "Wet packs" or "wet compresses" are also used on disturbed patients

Hydrotherapy is one of the oldest known types of therapy for quieting excited patients



for their sedative effects Here the patient is wrapped in wet sheets in such a way as to restrict his movements Alternating hot and cold showers or baths, or so-called "needle" showers, are used to stimulate depressed patients and for their general tonic effect

Electrotherapy consists of the application of heat by means of infra-red lamps, electric heat boxes, and diathermy The latter is widely used in cases of nerve inflammation and consists in heating internal tissues or bodily areas by means of high-frequency electric oscillations

Massage is often of great value because of its stimulating and tonic effect It is often emphasized that the personal contact with the patient in massage is also of psychological healing value

A wide range of other specialized medical techniques are, of course, used with mental patients Malarial fever or electrical heating devices which raise body temperature to 104 to 106 degrees are used to kill the syphilitic spirochete which has invaded the nervous system in paresis. (See page 314) Special surgical procedures are used to remove or alleviate brain tumors. Special diets and other medical procedures are of vital importance in arteriosclerosis and a wide range of other disorders Finally, new pharmaceuticals, such as dexedrine sulfate, which has been found of value in dispelling depression and chronic fatigue, are sometimes used in the medical treatment of mental disorders.

Now, in turning to psychological and sociological treatment procedures, it may be emphasized that therapy is a team proposition In some instances it is the medical aspects that require the major attention, whereas in others psychological and/or sociological procedures are most effective.

PSYCHOTHERAPY

Psychotherapy is directed toward helping the patient to achieve a more adequate personality adjustment This may mean reinforcing his existing ego defenses or it may mean varying degrees of personality restructuralization The specific aims and procedures adopted will, of course, depend upon the needs and strengths and weaknesses of the patient as well as upon the therapeutic facilities available

That psychotherapy, as practiced today, is not something completely new or strange or far removed from the ken of all of us is well brought out by Alexander[1]

> " . Everyone who tries to console a despondent friend, calm down a panicky child in a sense practices psychotherapy He tries by psychological means to restore the disturbed emotional equilibrium of another person Even these commonsense, everyday methods are based on the understanding of the nature of the disturbance, although on an intuitive and not a scientific understanding Talking over with a person an acute harassing experience is based on the instinctive knowledge of the curative effect of abreaction Giving advice and assuming a firm attitude again is based on the instinctive knowledge that the panicky and confused individual needs emotional support which we can give him by allowing him to lean on us We also know intuitively that a person who is overwhelmed by a threatening situation cannot use his reasoning faculties effectively and therefore we try to calm him down by giving him support At the same time discussing with him the objective situation, we lend him our own reasoning faculties. Doing all this, we then practice a combination of supportive and insight therapy. . Methodical psychotherapy to a large degree is nothing but a systematic, conscious application of methods by which we influence our fellow men in our daily life The most important difference is that intuitive knowledge is replaced by the well established general principles of psychodynamics." (p 110)

Most scientific psychotherapy with seriously

disordered patients takes place in a hospital setting. However, the various psychotherapeutic techniques and aids which we shall be discussing are by no means confined to hospitalized patients. Most neurotics, alcoholics, and antisocial personalities who receive psychotherapy do so outside a hospital, with psychiatrists or clinical psychologists in private practice, or through psychiatric clinics

AIMS

In general, psychotherapy aims toward personality growth in the direction of maturity, competence, and self-actualization This usually requires some measure of achievement of the following (1) increased insight, (2) the resolution of disabling conflicts, (3) increased self-acceptance, (4) more efficient techniques for coping with problems, and (5) the general strengthening of the ego structure of the patient along lines of adequacy and security.

These aims are by no means easy of achievement Often the patient's distorted environmental perspective and self-attitudes are the end product of faulty parent-child relationships reinforced by twenty or more years of life experiences In other instances the patient's life situation itself is well-nigh hopeless in terms of any adequate occupational, marital, or social adjustment, which in turn makes an adequate and happy adjustment unlikely even with the best psychotherapy It would be too much to expect that the psychotherapist could step in, and in a few hours of interview undo the entire past history of the patient and prepare him to meet a difficult life situation in an adequate and satisfying manner It is not to be expected that all psychotherapy can succeed

However, the psychotherapist does have certain assets on his side which may be of great value The most important of these is the inner drive of the patient toward integrity and health which we have discussed in the chapter on dynamics Although this inner drive is often obscured in more disturbed patients, the majority of mental patients are anxious, unhappy, and discouraged, and eager to cooperate in any program that holds some hope for improvement in their personality adjustment The second major asset of the psychotherapist is the unique personal relationship which he establishes with the patient. We shall discuss the therapeutic nature of this relationship in more detail shortly, and for the moment may point out only that it is a relationship which is friendly and permissive, enabling the patient to bring up and discuss his deepest conflicts and problems without fear of censure, retaliation, or punishment

TYPICAL STEPS IN PSYCHOTHERAPY

Although there are a number of different systematic views of psychotherapy such as psychoanalysis and psychobiology, as well as a wide range of therapeutic techniques from which the psychotherapist can choose, there are certain events or stages through which psychotherapy usually progresses These are

1. Creation of a therapeutic atmosphere and relationship. This includes the provision of a room or office that is reasonably quiet and otherwise suitable for interview or discussion purposes Typically, as we have suggested, the therapist maintains a friendly and accepting attitude which is conducive to the establishment of confidence on the part of the patient, so that he can feel secure in bringing up his real problems In addition, it is the therapist's function to plan or "structure" the therapeutic situation in terms of time, expense, responsibility, and so on In general, the patient and therapist sit facing each other and the therapy is conducted via discussion or interview. In some instances, the therapist and patient may sit side by side, or the patient may recline on a couch facing away from the therapist

2. Emotional release (catharsis). In the permissive atmosphere of the therapeutic situation, the patient brings up his problems and expresses the hostility, fear, guilt, and other emotions that center around them Often, as he "talks out" his problems, hostility or fear

or other feelings of which he was totally unaware will come to the surface. This "release" and verbal expression of emotional feeling is considered essential to effective psychotherapy, and paves the way for the development of insight and positive action toward the solution of his problems. For until the patient "gets these feelings off his chest" the tension and conflict connected with them operate as blocks to satisfactory adjustment.

To assist in the "uncovering" of emotional conflicts and the release of the tensions connected with them, various techniques such as questioning, interpretation, free association, and hypnosis may be used for "probing." These will all be discussed in some detail during the present chapter.

3. Insight. As the patient's emotional conflicts are brought out into the open where he can see them for what they are, he spontaneously gains a good deal of understanding into his motivations and behavior. For the first time, for example, he may realize that his level of aspiration is unrealistically high and that this is what keeps him continually feeling inadequate and inferior. This developing understanding or "insight" may be augmented by appropriate "interpretations" by the therapist and provides the basis for positive action. For only through an adequate understanding of ourselves and our problems can we improve our adjustive techniques.

4. Emotional re-education. As the individual gains insight into his problems and the faulty ways in which he has been trying to solve them, he is in a position to change his present attitudes and behavior and to attempt some more appropriate adjustive measures. This process of assisting the patient to modify his underlying emotional attitudes and work out new techniques for dealing with his problems, we refer to as emotional re-education. It is a long, slow, laborious process—"more an educational process than a therapy in the original sense." (Alexander and French[2], p. 18). Often the first steps consist of "positive actions" of a minor sort, such as learning to express hostility in socially acceptable ways rather than keeping it bottled up. These positive actions gradually lead to increased confidence.

5. Termination. When the patient has "worked through" his conflicts and achieved a more effective personality adjustment, the time comes for the termination of the therapy. This is ordinarily not difficult inasmuch as the patient now feels more confident and able to get along on his own. However, it is important to leave the way open for the patient to return any time he feels the need.

Thus, the sequence of events in psychotherapy, regardless of the particular systematic approach, typically involves the establishment of a therapeutic situation, emotional discharge, insight into the uncovered material, and positive actions or corrective emotional experiences necessary to break up and replace the old reaction patterns (Alexander[1]). Whether this abreaction and the corrective experience take place through amytal interviews, or on a couch during free association, or in direct discussion between patient and therapist, or with the aid of hypnosis, or whether the patient is seen one hour a day, five days a week, as in psychoanalysis or once a week, as in various eclectic therapies—all these are technical details which can best be determined by the nature of the individual case. In some cases the development of insight, with resolution of conflicts and emotional re-education, may be a very slow and laborious process which must be achieved in small steps. In patients with greater ego strength or less severe conflicts, the therapeutic process may go ahead rapidly. But although we shall find considerable variation in points of view, therapeutic techniques, and actual results, we shall find that the basic fundamentals of psychotherapy are the same.

MAJOR DIMENSIONS OF PSYCHOTHERAPY

Up to this point we have noted the aims and the typical stages of the psychotherapeu-

tic process We shall shortly consider various specific techniques and systematic approaches Before going on, however, let us glance briefly at certain other dimensions or characteristics of psychotherapy which will help to provide us with an overall view of this rather complex field.

Individual vs. group. Where the therapist treats one patient at a time, the procedure is referred to as individual therapy Its effectiveness depends primarily upon the patient-therapist relationship In group therapy, the therapist handles several patients at the same time. Here the patient is treated through the medium of the group, and the relationship of the patient to other members of the group as well as to the therapist is of great importance in determining the effects of the therapy upon him

In general, individual therapy is more effective in working through deep conflict material, such as conflicts centering around homosexuality, while group therapy has proved of particular value in the socialization of the patient Feelings of isolation are removed through the mutual sharing of problems in which each member realizes that others have difficulties similar to his, and there is a mutual support and assistance in working through problems. Furthermore, the group relationship provides each member with opportunities for social reality testing and the development of more efficient techniques in interpersonal relations. Since the treatment of most mental patients calls for both a working through of deep conflicts and a more effective socialization, a combination of individual and group psychotherapy is usually the most effective therapeutic approach

Goal-limited vs. long-term. The historical leader among modern psychotherapeutic approaches—standard psychoanalysis—attempts a major restructuralization of the personality Typically this requires therapy sessions five times a week over a period of several years However desirable such ambitious *long-term* psychotherapy may be, it does restrict the benefits of psychotherapy to a relatively small number of patients who can afford the time and money As a result, various *brief* or *goal-limited* forms of treatment have now been worked out to make psychotherapy available to larger numbers of people who are in need of it These goal-limited approaches are designed to benefit the patient as much as possible in the shortest period of time. To achieve this they restrict the therapy to those conflicts or problems whose resolution will most aid the patient's immediate personality adjustment These briefer approaches include both individual and group psychotherapy and both analytically* and nonanalytically oriented approaches.

Goal-limited therapy has proved of particular value in mental hospitals and clinics where the lack of adequate personnel and the small amount of time available for psychotherapy for each patient restrict more intensive, long-range therapy to a very few cases. It may be emphasized here that goal-limited therapy is not restricted to "symptomatic" or "surface" therapy but may also be used in the working through of "deep" emotional conflicts.

Surface vs. depth. In so-called surface therapy, there is no attempt to go deeply into the patient's underlying conflicts Rather an attempt is made to reassure the patient and to reinforce his present ego defenses In many crowded mental hospitals, surface therapy following insulin or electro-shock is about all the psychotherapy the patient ever gets There are times, however, when surface therapy is all a patient needs. Usually this involves cases where the patient's ego strength and adjustive adequacy are fairly good but where overwhelming stress has made him a psychiatric casualty—where the excessive stress rather than any deep pathological trend within the personality is the main cause of the difficulty. Surface therapy may also be indicated in cases where the individual is quite

* "Analytical" is commonly used synonymously with "psychoanalytical"

old or where there is such a range and intensity in the underlying conflicts that the most appropriate therapy, in view of available facilities, seems to be a reinforcement of present defenses and the actual repression of deep conflicts For example, an older patient may be attempting to handle intense underlying conflicts centering around dependency and homosexuality by means of repression and reaction formation Although these defenses have partially failed, resulting in the patient's need for psychiatric assistance, they may still enable him to maintain a semblance of self-integrity. At this point psychotherapy designed to help him reinforce these defenses and make them more effective may be more appropriate than attempting to uncover and work through his intense underlying conflicts This is "repressive" and "supportive" as compared with "uncovering" psychotherapy

In depth therapy, the uncovering and working through of deep conflictual material is attempted This may be achieved in either goal-limited or long-term psychotherapy and, of course, is ordinarily to be preferred to surface therapy for the achievement of long-range personality adjustment.

Directive vs. nondirective. There are wide differences among therapists with respect to the amount of responsibility they place upon the patient and the degree of responsibility they themselves assume for the direction of the therapy. In what is termed "directive" therapy, the therapist takes an "active" role in the therapy situation This usually includes taking the lead in attempting to uncover the patient's underlying conflicts, interpreting his findings to the patient, and guiding him toward positive actions designed to effect personality changes The use of directive therapy is illustrated in the following excerpt from a case record

Pt "I tried to ignore all these things At 19 I was so infatuated with the girl, yet so scared, that I could not approach her The feeling was so strong that it seemed to bottle itself up. Thus it was all or nothing with me. So far it has been nothing With the present girl, when I feel so strongly about her, I feel I must do *something* about it I do nothing. I am afraid of the devil"

Th "It does not look as though you have sold yourself to the devil after all"

Pt. "If it broke out, I would go wild"

Th. "And that is?"

Pt. "Possibly I might hurt the girl in some way The thought occurs to me that in this frenzy I might kill the girl"

Th "How would you kill her?"

Pt "I might strangle her, with my hands round her neck"

Th "What is it that you are strangling?"

Pt "I am strangling my own feelings—my own feelings of a great desire for sexual intercourse with her"

Th "So the girl stands for your desire which you are so afraid of, just as the devil stood for it In this phantasy of strangling the girl you are dramatizing the struggle that is within your own mind

In so-called nondirective therapy, the therapist is less active and the major share of the responsibility for the therapy rests with the patient Here the therapist merely provides a friendly and permissive atmosphere which enables the patient to feel secure and accepted and to bring up his innermost thoughts and feelings without fear of censure or retaliation. Rather than "probing" and interpreting, the therapist confines his efforts to helping the patient to clarify his underlying feelings and attitudes as they emerge in the therapy situation This clarification is usually achieved by means of "reflecting" the feelings and attitudes expressed by the patient rather than by interpretations The following excerpt* from the case record of a patient treated nondirectively will help to indicate the difference between nondirective and directive approaches.

* Reprinted from *A Casebook of a Medical Psychologist* by Charles Berg by permission of W W Norton & Company, Inc and George Allen & Unwin, Ltd Copyright 1948 by W W Norton & Company, Inc

Pt I am afraid I am falling in love with her .. and I can't study or do anything when I don't see her . and yet I know she would not be faithful to me . . I just don't know which way to turn

Th. You want to continue seeing Frances but you are afraid you will be hurt

Pt Yes, I look forward so much to seeing her and I don't think I could get along without her .. I can't study or anything when I don't see her but, well she likes to run around and I know she has sexual relations with other fellows and . well this upsets me I can't stand the thought of her making love to someone else If she would only settle down with me, but well I am afraid she won't

Th You feel that everything would work out if she only loved you, but you are afraid

Pt Afraid to even try I guess she does insist that she loves me but well . . .

In actual practice directive and nondirective approaches represent two poles of a continuum and few therapists are either completely directive or completely nondirective Usually it is a matter of emphasis, leaving room for considerable flexibility in terms of the needs of the particular patient. In general, nondirective emphasis has proved most effective in the handling of patients with fairly stable personalities who are having difficulty in coping with particular immediate problems, whereas directive emphasis has proved most appropriate in the handling of more disturbed and severely ill mental patients. Later in the chapter we shall examine in considerable detail the theory behind both the directive and the nondirective approaches and the ways in which they are employed by the major "schools"

Flexibility vs. inflexibility. There are some therapists who faithfully follow a particular systematic approach such as psychoanalysis, and adhere closely to the dynamic concepts and therapeutic techniques advocated by that approach In fact, some therapists have maintained that directive and nondirective approaches are incompatible and that a therapist should confine himself to the use of one or the other However, the great majority of psychotherapists can perhaps be best described as eclectic—that is, they utilize various concepts and procedures from psychoanalysis and other approaches as the needs of a given patient warrant This does not mean that standard psychoanalysis or nondirective therapy is not entirely appropriate for certain patients. However, to attempt to apply one of these approaches to all persons in need of psychotherapy would be a wasteful venture Obviously, an approach confined largely to the nondirective clarification of feeling and attitude would likely prove futile in the treatment of a chronic schizophrenic who is delusional and hallucinated

Those therapists who confine themselves to a certain procedure usually carefully select patients who can best profit from it For example, a 60-year-old schizophrenic would not be selected for standard psychoanalysis Other therapists, however, accept a more heterogeneous group of patients and modify their therapeutic procedures as best fits the needs of each case

Segregated vs. total push. A great deal of psychotherapy takes place in what might be called a "segregated" fashion The patient may receive an hour of psychotherapy several times a week in an attempt to help him work through his conflicts and achieve healthier techniques of adjustment, but little effort is made to relate the therapy to his life situation or to coordinate it with his other activities In contrast to this is what may be called "total push" or "milieu" therapy, where the entire life situation and all the activities of the patient are brought directly into the therapeutic plan This, of course, is confined largely to hospitalized patients It involves the coordination of all of the patient's activities from the time he gets up in the morning until he goes to bed at night through the careful planning and participation of the hospital staff—psychiatrists, psychologists, nurses, ward attendants, occupational therapists, and others who

come into contact with the patient. For the patient who feels unwanted and unworthy of esteem from others, this may involve creating an atmosphere of warmth and love. Similarly, various other patterns of personal relationships may be combined with psychotherapy, planned recreation, and other therapeutic activities to provide maximum therapeutic effectiveness. The results with total-push therapy have been most gratifying, and at the major psychiatric clinics and hospitals in the United States, every activity in the hospital is utilized, in so far as possible, for therapeutic purposes.

There are various other dimensions which might be mentioned in our survey of modern psychotherapy such as analytic vs. nonanalytic approaches, hospital vs. nonhospital treatment, interview vs. noninterview (environmental) therapy, and so on. Since these dimensions will be covered in the course of our discussion, we do not need to elaborate upon them specifically here, although it may be well to emphasize again that psychotherapy may take place in a hospital setting, or in an outpatient psychiatric clinic, or in an office in private practice. Although the patients treated in outpatient clinics and in private practice are not as severely disturbed as those seen in mental hospitals, the same general psychotherapeutic principles apply.

MAJOR PSYCHOTHERAPEUTIC TECHNIQUES AND AIDS

Inasmuch as entire books have been written around many of the specific psychotherapeutic techniques and their uses, we shall content ourselves here with a brief summary of the more important ones. They may be used in almost any combination, depending on the needs of the individual patient. In acute conditions such as those we discussed in Chapter 5, where previously well-adjusted individuals are overwhelmed by especially severe stresses, the therapist may select techniques chiefly designed to help reduce the intensity of the disturbing emotions by emotional support and release. Where the difficulty is a more chronic, long-term failure, it may be necessary for the underlying conflicts to be brought to light and worked through.

Special techniques in interview therapy. Often individuals who have never participated in psychotherapy wonder what the patient talks about and how the therapist manages to insure the direction of conversation along therapeutic channels. Actually there are a variety of techniques at the disposal of the therapist which he can use in attempting to achieve emotional release, develop insight, and promote emotional re-education in a patient. Among the most important of these techniques are the following:

1. *Reflection.* We have already noted the use of reflection in helping the patient to clarify his underlying feelings and attitudes. In essence, this technique consists in repeating the attitudes and feelings expressed by the patient. In this way the therapist acts as a sort of mirror in which the patient is enabled to see the attitudes and feelings that he has expressed for what they are. This is not a simple technique to use: considerable training and skill are needed to recognize the real attitudes and feelings of the patient. Should the therapist make repeated errors, the patient may feel misunderstood and may discontinue the therapy or become uncooperative.

The following excerpt from a case record shows the use of reflection in clarifying the patient's attitudes and feelings concerning his problem and shows also the need for perceptiveness and skill in the therapist in picking out what should be mirrored.

Pt. My main trouble seems to be my marriage. My wife is an ex-alcoholic. I knew this when I married her, but I guess I didn't realize what it really meant.

Th. You anticipated some difficulties but you feel that they are more than you bargained for.

Pt. Yes. She doesn't take care of the house, and when I return home she is usually out at the local bar. Since we have been married she

doesn't get drunk, but she just keeps drinking When a guy comes home after work and his wife isn't home and his dinner isn't ready, it makes him mad

Th. You feel that she neglects her duties as a wife and this makes you feel resentful

Pt Exactly I get so mad sometimes that I feel like blowing up or even beating her up . .

2. *Interpretation* The technique of interpretation consists essentially in pointing out to the patient what his underlying motivations and attitudes are, as revealed in the course of therapy. It is one of the most difficult of all therapeutic techniques to use effectively. Premature or traumatic interpretations may effectively block further progress For example, the therapist may be convinced after the first therapy session that the patient's conflict centers around hostility aroused by an overly possessive and domineering mother But if at this point he makes such an interpretation, the patient is likely to reject it, insisting that his mother is a wonderful woman and that his only feelings toward her are those of love. Thus interpretations must be made only as the patient becomes ready to accept and profit from them by increased insight and understanding. Where their timing is appropriate, such interpretations may lead to the relaxing of ego defenses, and thus enable the patient to get a little closer to underlying conflicts and problems This apparently comes about through the supporting influence of the therapist, which makes him feel more secure, and by the perception that his conflicts are not as dangerous or threatening as his elaborate ego defenses would imply

Another common error in the use of interpretation has been the naive assumption that intellectual insight into our problems will lead automatically to a change in our emotional attitudes and behavior—that as soon as the patient understands the reasons for his difficulties, he will voluntarily modify his behavior Psychotherapists operating on this assumption have devoted their energies to diagnosing the patient's difficulties and interpreting their findings to him The danger inherent in this procedure is well summarized by Murphy and Weinreb[41] in a discussion of the training of psychotherapists in a Veterans Administration Hospital

"By far, the most common problem was the universal tendency of the resident to interpret the patient's symptoms to him unwisely, too frequently and too deeply, thus endeavoring to substitute intellectual insight for the self-revelation which is the true goal with any effective analytic psychotherapy There would accordingly be created unsurmountable barriers and problems in resistance with which they did not have the technical ability to cope The tendency to confront the patient with the doctor's understanding is an evidence of psychotherapeutic anxiety . The defensiveness of their behavior is frequently manifested by authoritative interpretations and a pinning down of their patients with keen, if futile logic Hostile reactions by patients to this form of approach are then mistaken for therapeutic triumphs in relieving latent hostility " (p 102)

Thus effective interpretation is not a simple matter and requires considerable perceptiveness and restraint on the part of the therapist If a patient feels inferior and anxious much of the time, it will not suffice to point out to him that this stems from an insecure mother and unfavorable comparisons with an older brother Such an intellectualized interpretation may be quite accurate, but the patient still goes on feeling anxious and inferior. Perhaps we might illustrate this point by a rather far-fetched but nonetheless realistic illustration. Suppose we were to find several flies in our soup. Would the soup be made any the more palatable by the intellectual explanation that the flies had been thoroughly cooked and thus disinfected of any germs they might have carried? Although the intellectual explanation is completely logical and quite accurate, the negative emotional feelings would in all probability remain.

This does not mean to imply that the patient's insight into the nature of his difficulties is not important or that appropriate interpretations are not of vital significance in promoting insight and even corrective emotional experiences, but only that premature or highly intellectualized interpretations are likely to retard rather than help therapy As a result, modern psychotherapy has come to place increasing emphasis upon helping the patient himself to recognize, clarify, and accept his feelings

3. *Associative anamnesis* Deutsch[7] has worked out an interview technique which he refers to as "associative anamnesis" Its purpose is to keep the therapeutic approach centered around certain conflicts or problems which the therapist has decided are the core ones that most need to be worked through This is a complicated technique and provides the basic procedure for a goal-limited psychotherapeutic approach which he terms "sector therapy" With this method, the therapist unobtrusively but effectively controls the direction of the therapy by selecting and repeating certain key words or phrases in the patient's statements. For example, suppose the patient states that he has "always hated women." At this point the therapist may feel it desirable to explore the patient's past in this respect, but instead of asking him to go back and tell him about his childhood, he merely repeats the word "always," which then forces the patient into the past smoothly and without an interruption in his chain of associations On the other hand, if he repeats the word "hated," the patient's associations are directed toward the clarification of his feelings and attitudes in relation to "hating women"

4. *Questions* There are many occasions when the clarification of feeling and the promotion of insight are best served by direct questions and requests to the patient to elaborate on the meaning of his statement. By means of such questions as "How did you feel?" or "What were your thoughts?" or "Would you mind explaining what you mean?" or "Would you tell me a little more about this?" the therapist can effectively control the direction of the therapy discussion as seems most profitable.

Personal relationship. The personal relationship between the patient and the therapist is fully as important as anything that is said during the interviews. Any lack of genuine understanding or interest on the part of the therapist may be quickly sensed by the patient, and even with the most skillful use of therapeutic techniques the treatment may not progress This is particularly true of shy, withdrawn individuals who hesitantly reach out for help, and are apt to withdraw again unless they receive adequate approval, affection, and support. Although there is some variation in this respect, most therapists begin by creating a warm, friendly atmosphere.

1. *Rapport* Often for the first time the patient finds himself in a permissive and accepting atmosphere in which he feels that he is truly understood and free to express his innermost thoughts and feelings. This feeling of confidence and harmony which is established between the therapist and the patient is referred to as *rapport*

2. *Transference* As the patient and therapist interact in the process of therapy, this relationship between the patient and therapist becomes a more complex and emotionally involved one Often the patient carries over and applies to the therapist the attitudes formed in his relations with people in the past The therapist may be viewed as a father or as a rival, or by a female patient as an "ideal husband and lover" These emotional relationships are largely irrational from the point of view of the realities of the situation For example, the patient who reacts to the therapist as if he were his father carries over various attitudes that he has had toward his own father. If his father was a distant and fearful authority figure, these attitudes may be quite inappropriate when applied to the therapist. Similarly the patient who views the therapist as an ideal lover is hardly behaving in the

light of reality. The term *transference* is used to refer to these irrational aspects of the emotional relationship that comes to exist between the therapist and the patient. However irrational such transference relationships may be, the recognition and wise handling of them is one of the most important aspects of psychotherapy. For example, suppose the patient who identifies the therapist with his father had a remote, distant, and rejecting father in real life The therapist, by recognizing the transference relationship, may be able to provide the patient with what he particularly needs—the experience of having a "good" father, thus making it possible for the patient to work through his conflicts centering around his own father and continue the personality growth which was interrupted in childhood by the father's rejection

On the other hand, the failure to recognize and properly handle such transference relationships can prove fatal to successful psychotherapy If the therapist does not properly handle the transference of a female patient who views him as an "ideal lover," his failure may lead to a more severe conflict than the one which originally brought her for psychiatric help The author is reminded of one therapist who let such a transference relationship get so far out of hand that the patient told him she would commit suicide unless he would divorce his wife and marry her.

It is not possible here to consider the complexities of transference relationships at greater length, but it should be stressed that such relationships by no means always follow simple "love" and "hate" patterns. Often the patient is ambivalent and in conflict—distrusting the therapist and feeling hostile toward him as a symbol of authority, but at the same time seeking acceptance and love.

Also the problems of transference are by no means confined to the patient, for the therapist too may have various irrational feelings toward the patient This is known as *counter-transference* and must be recognized and properly handled by the therapist. For this reason it is generally felt important for the therapist himself to have been analyzed* or to have undergone other therapy so that he will have worked through his own conflicts and attained a better understanding of his own motivations and blind spots. Without this he is often apt to get into difficulty in the handling of the transference relationship.

Although most psychotherapists recognize transference as a reality and realize the importance of utilizing it for therapeutic purposes, we shall see that it is the psychoanalysts who place the greater emphasis on the transference situation as the essential medium for successful therapy

3. *Love* Strangely enough, very little is written or really known about one of the most potent of all therapeutic factors—*love* Particularly with psychotic patients who have withdrawn from a world viewed as hostile and frustrating, or who have inner conflicts of a guilt-arousing nature, love is a potent therapeutic weapon Love from others raises the self-evaluation of the patient and helps him to accept himself as a worth-while person, it modifies the withdrawn patient's environmental evaluation so that he becomes able to relate to the therapist and bring up his conflicts and difficulties The need of many of these patients for unqualified love, their longing for affection and acceptance, is often so great that until this need is partially met they can only be fearful, withdrawn, broken individuals

Although the work of William Tuke and Pinel, in the modification of the hospital treatment of patients, was a great step toward the provision of a loving and accepting atmosphere, the actual use of love in psychotherapy on a systematic basis has been rare indeed. Now, however, it may actually be prescribed as part of the psychotherapeutic program for a given patient. At the Menninger Foundation, for example, "love un-

* This is a term meaning therapy by psychoanalytic techniques, to be more fully described on pages 543-551

solicited" may be prescribed and means that all those persons dealing with the patient are to show him unqualified acceptance and affection. It is remarkably effective in establishing relationships with the patient which enable him to lower his ego defenses and approach the therapist with his problems We are, of course, using "love" here in a general affectional sense as "brotherly love" and not in the sexual sense Not all patients need or can accept affection of this sort, but the beneficial effect of love on the general hospital atmosphere as well as on the particular patients for whom it is prescribed is often dramatic to observe.

Free association, dream analysis. We shall show the development and use of the technique of free association in our subsequent discussion of psychoanalytic therapy The essence of this technique is for the patient to express every random thought and idea that come into his mind. In utilizing this technique it is customary for the patient to assume a comfortable and relaxed position, as on a couch ' The therapist typically occupies a position to the side and rear of the patient so as not to intrude himself upon the patient's awareness This free and uninhibited flow of associations leads to the gradual uncovering of underlying conflicts and to emotional



Dr A A Brill and a patient during a therapy session

catharsis And by means of appropriate interpretations to the patient as to what his free associations have revealed, the therapist helps the patient to achieve increased insight into underlying motivations and conflicts of which he has been unaware.

When the patient nears traumatic material there may be a blocking of associations, or a shifting of thought and ideas—a clear indication to the therapist that the patient is skirting some underlying conflict which he is trying, usually unconsciously, to avoid facing This tendency to maintain existing ego defenses and avoid the uncovering of anxiety-arousing conflicts is referred to as *resistance,* and, of course, is a common phenomenon in psychotherapy The patient's resistance may lead to rejection of the therapist's interpretations, to coming late or failing to keep appointments, to the termination of therapy, and so on The proper handling of resistance thus becomes of crucial importance, whether the therapist is using free association or other therapeutic techniques

Another important technique for uncovering the underlying feelings and conflicts of the patient is that of dream interpretation Dreams have been referred to as the "royal road to the unconscious," for they often involve the gratification of the patient's repressed desires or the representation of his inner conflicts and difficulties in either direct or symbolic form For interpreting dreams, a number of techniques have been worked out, the most widely utilized being that developed by Freud It is based on the assumption that the dream has two contents the *manifest* content, which is the dream as it appears to the dreamer, and the *latent* content, which is the symbolic meaning of the manifest content For example, an old witch (manifest content) might symbolically represent the patient's wife or mother (latent content) By applying the technique of free association to the manifest content, the symbolic meaning or latent content is gradually brought to light This is illustrated in an example reported by Berg[3] The

patient, a young university lecturer who had strong feelings of being rejected and inferior to others, related the following dream:*

> "I came into the dining-room to talk to my father while he was having supper I was sitting there playing with my cat The cat was asking for a long finger biscuit, which she likes. I was going to give it to her but my father said she mustn't have it as it was not good for her
>
> "I said 'very well' and put the tin away The cat was annoyed, and it bit my shoe and scratched me My father had finished his meal I went upstairs to a bed that was much too high for me to be comfortable in I felt very depressed." (p 106)

Subsequently, during her associations of thought, some of the symbolism in the dream was brought out In the course of her associations of thought, she said·

> "Father would not let me wear pretty clothes and go to parties when I was a girl He seemed to have forgotten that girls get married Career was everything to him, I had to do exams all the time There was never any lovemaking, nor indeed any pleasure, in my young life The bed that was too high is my job which is too exalted and uncomfortable for me."

Berg sums up the meaning as follows

> "Thus her father rejects and refuses her sexual life (the desires of the pussy) while gratifying his own (he finished his meal) Conflict and injury results (the cat bit and scratched her) She ignores this and goes to a high, uncomfortable bed (her academic career) and feels depressed (and inferior)" (pp. 106-107)

The preceding discussion is not intended to cover the dynamics of dreams, but merely to indicate the general nature of dream interpretation and its possible value as a psychotherapeutic technique It should be pointed out in passing that not all dreams are amenable to interpretation and that the meaning of a dream is not usually evident to the dreamer Likewise, the apparent meaning of a particular dream or the interpretation placed upon it by the therapist may not accurately represent its actual role in the personality dynamics of the patient

Hypnotherapy. The use of hypnosis was known among the ancient Egyptians and other peoples, but its modern use in psychotherapy is credited to Mesmer, whom we have previously mentioned in our historical introduction. Since Mesmer's work there have been periodic rises and falls in its popularity. Hypnosis played an important role in the work of Liébault and Bernheim, who found that it could be used to modify conversion (hysterical) symptoms even without any understanding of their etiology.

As Freud discovered later, however, the use of hypnosis to remove symptoms was only temporarily effective The symptoms would return again or crop up in some other form. Hence Freud discontinued the use of hypnosis in psychotherapy, and it has not been until the last decade that experimental research into hypnosis by Erickson[9], Brenman and Gill[5], and other investigators has led to a better understanding of its dynamics and to a renewed interest in its psychotherapeutic potentialities.

1. *Induction of hypnosis* There are many techniques for the induction of hypnosis which may be used flexibly according to the signs of approaching hypnosis manifested by the subject In general, these techniques have the following factors in common: (1) enlisting the cooperation of the subject and allaying any fears he may have concerning hypnosis, (2) having the subject assume a comfortable position and relax completely, (3) narrowing and focusing the subject's attention—for example, having him fix his gaze on the eyes of the therapist or upon some bright object, and (4) directing the subject's activities by means of reinforced suggestions This is typically based upon the sheer repe-

* Reprinted from *A Case Book of a Medical Psychologist* by Charles Berg by permission of W W Norton & Company, Inc and George Allen & Unwin, Ltd Copyright 1948 by W W Norton & Company, Inc

tition of suggestions and the use of normal bodily reactions as if they have come about at the direction of the therapist, creating the impression on the part of the subject that he is obeying the suggestions of the therapist and thus increasing his suggestibility to further directions For example, the subject may be directed to look upward toward a light and after a short period of time is told that his eyelids feel slightly heavy This is a normal reaction to the strain of looking upward but the subject interprets it as due to the directions of the therapist, and the way is thus paved for the acceptance of additional suggestions One interesting modern innovation is the use of recordings to induce hypnosis, although such recordings are somewhat limited in effectiveness by the fact that the directions cannot be modified to suit a particular subject.

Not all persons can, of course, be hypnotized and there are varying degrees in the depth of hypnosis produced The latter may vary from light hypnosis, in which the subject becomes distinctly drowsy and tends to follow simple directions, to deep hypnosis, in which complete anesthesia may be produced and the subject may open his eyes and move about without any disturbance of the hypnotic state

2. *Hypnotic behavior* There are many interesting phenomena which can be produced under hypnosis, such as cataleptic rigidity (in which the subject can be made to stiffen his body and can be suspended across two chairs like a board), anesthesia (wherein a bodily part or even the entire body can be made insensible to feeling so that surgical operations may be performed upon the subject without his experiencing any pain), and amnesia for the hypnotic trance (which is usually spontaneous) However, we are primarily concerned with certain phenomena which relate more directly to the use of hypnosis in psychotherapy Among these are·

a) Recall of buried memories Traumatic experiences which are repressed from consciousness may be recovered under hypnosis In combat-exhaustion cases in World War II, hypnosis was occasionally used for having the amnesic patients relive their battle experience In this way they could discharge the emotional tensions associated with it and permit it to be assimilated into the ego structure. The "shock" reactions of civilian life may be similarly handled, as well as various traumatic experiences of childhood and adolescence which may be tending to the maintenance of distorted environmental and self attitudes

b) Age regression Closely related to memory recall is age regression, in which the subject may be told that he has become a six-year-old child again and will subsequently act, talk, and think very much as he did at the age of six years. In regressing a subject back through successive ages even his handwriting will become increasingly childish Age regression has been found of particular value in going back to the time just preceding the onset of certain symptoms such as phobias and uncovering the particular events which precipitated the symptoms.* Thus age regression may be of value in recovering buried trauma in order to relieve the symptoms associated with it

Sometimes therapy consists in systematically going back and successively working through, with the aid of the therapist, many early experiences which are of significance in the development of the patient's mental disorder Through this process the patient is able to view these experiences in a new, more mature way, leading to healthy modifications in existing attitudes and ego structure This procedure, which is referred to as *hypnoanalysis,* requires a highly skilled therapist As Wolberg[45] points out

"In hypnoanalysis the hypnotist acts as a guide leading the patient through a maze of unconscious material The hypnotist must therefore know which trends are significant and which are of secondary importance. He must know how to handle the transference and resistance

*See page 201 for a case history in which this technique was employed

and how to make appropriate and timely interpretations" (p 171)

Lecron and Bordeaux[21] report a case which well illustrates this procedure

"Betty R——, a forty-two-year-old spinster, had come to us with a neurosis of long standing, one of the symptoms of which was a compulsive necessity to clear her throat every few moments This was not only extremely annoying and embarrassing, but had compelled her to give up a promising career as a singer and become an office worker—employment which she despised During hypnoanalysis, an effort was made to locate the cause for this particular symptom Questioning brought a statement that it had first developed eighteen years earlier, and she was sure she was twenty-four years old at the time

"Placed in a deep trance, she was successfully regressed to that age, but it was found that the throat distress was still present She was then instructed to regress still further to a time left indefinite but just before the genesis of the trouble, whereupon she stated that she was twenty-two and her throat no longer bothered her She was then told to reexperience whatever strong emotional event had occurred at that time, whereupon she told of attending a picnic with her fiancé, whom she loved deeply and was to marry within a few days They picnicked at a lake on which they went canoeing, and she told of the craft tipping over and their struggles in the water. She was unable to swim, but the young man saved her by pulling her to the overturned canoe, to which she clung until rescued by others Not a good swimmer himself and exhausted by his efforts, he had gone down and was drowned All was described with great emotional discharge, and finally she seemed to be choking as though swallowing water After she had become calmer she cried, 'I love him so, I can't stand losing him, I just can't swallow it, it sticks in my throat!' Then she added, 'Why, that's the reason I clear my throat!' She was returned to the present and the trance was ended Subsequently, with further insight and reeducation the symptom disappeared and she found herself better adjusted to life" (pp. 211-212)

c) Dream induction By means of hypnosis, dreams can be made to occur during the hypnotic trance or later during the normal waking state. Such dreams may be valuable in uncovering repressed desires and conflicts and in ascertaining the real attitudes of the patient toward various persons in his family and social environment. Wolberg[40], for example, cites the case of a patient whose strong resistance to therapy made it impossible for her to express herself or associate freely and hence led to an impasse in the therapy. She was hypnotized and it was suggested to her that she would dream of the reasons for her block Her dream was

"I am running in a maze of trees, desperately trying to escape you You are dressed in a white gown You are a high priest and are able to overtake me with ease I am frightened" (p 190)

Wolberg[15] then suggested that the patient would have a number of dreams which would help her to understand her current feelings toward the therapist, and by this means decreased her resistance to the therapy

d) Post-hypnotic suggestions Perhaps the most widely used of all hypnotic procedures in psychotherapy is that of post-hynotic suggestions, whereby suggestions made in the hypnotic trance are carried over into the waking state although the patient is not aware of their source. For example, by means of post-hypnotic suggestion, the patient may be told that he will not stutter after he awakens or that he will no longer desire to smoke or drink When properly handled, such hypnotic suggestions carry over effectively into the waking state, but unfortunately their duration may be short That is, the individual will again experience a desire to smoke or drink in a few hours or days, unless the suggestion is continually reinforced

Of course, post-hypnotic suggestions of such a direct nature do little more than treat the symptoms, for they do nothing to remove the conditions that cause the stuttering or the drinking. In addition, the eventual relapse of the patient may undermine his confidence in himself and in the therapy because it represents one more failure Even so, the immediate alleviation of symptoms is often an important aspect of therapy It may give the patient considerable reassurance and encouragement, and it may help pave the way for other measures aimed at modifying the existing ego structure and removing the causes for the symptoms

Direct persuasive suggestion under hypnosis was the type of procedure utilized by most hypnotherapists in the past Since it often resulted in a dramatic removal or modification of symptoms, many patients were mistakenly pronounced cured Used by modern therapists, the cathartic values, the uncovering of emotional conflicts, and the rapid removal of symptoms are supplemented by other therapeutic procedures that promote insight and corrective emotional experiences

In completing our discussion of hypnosis, a warning note should perhaps be sounded concerning the possible dangers of hypnosis in the hands of untrained persons "Amateur hypnosis" serves no useful purpose and may injure the subject as well as involve the hypnotist in an unpleasant situation

Narcotherapy. Although it has long been known that patients under the influence of alcohol and during the induction phases of an anesthetic will reveal personal conflicts, repressed motivations, and other usually unrecognized facets of the personality, it was the English psychiatrist Horsley[19] who, in 1936, made the first systematic use of the drowsiness produced by the intravenous injection of barbiturate drugs for the diagnosis and treatment of mental disorders. He called this method "narcoanalysis"

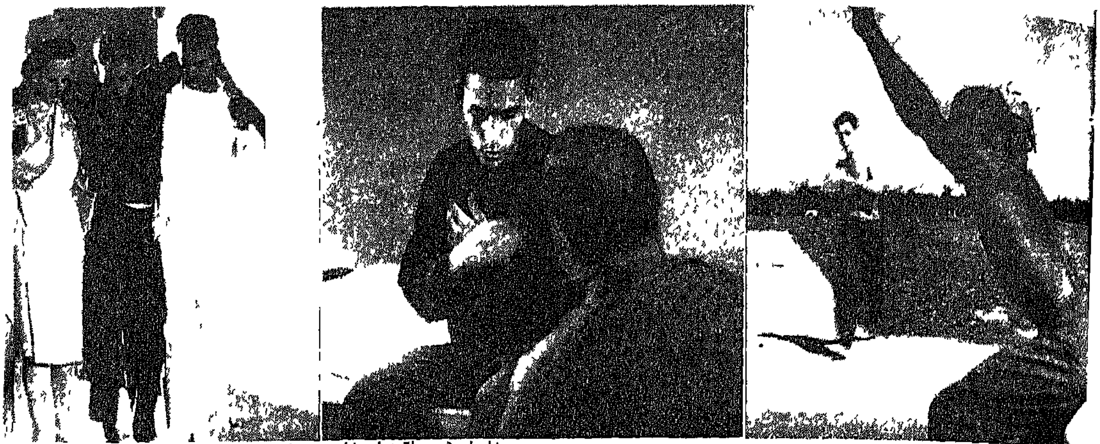
During World War II, Grinker and Spiegel[15] used a modification of this method for the treatment of combat-exhaustion cases, calling their modification "narcosynthesis" Their technique has since been applied with varying success to civilian disorders

The two drugs principally used in narcotherapy are sodium amytal and sodium pentothal. The patient usually reclines comfortably on a cot and as the needle is introduced for the intravenous injection, he is asked to count backwards from a hundred as far as he can The injection is continued until the patient's counting becomes confused and his speech becomes thick The hypodermic needle is then withdrawn and the amytal or pentothal interview is under way

Under the influence of these drugs, a person is much more suggestible than normally and tends to talk garrulously of trivial or intimate events Combat-exhaustion cases who have undergone severe traumatic experiences may be told that they are again in the front lines, with specific details added depending upon the amount of known history The patient then typically launches into a vivid account of his battle experience accompanied by intense emotional expression and appropriate motor activity. This is well described by Grinker and Spiegel[15]:

"Some patients act out the traumatic parts of the battle scene If this is their reaction they are allowed to get out of bed and to wander about the room looking for a slit trench, a lost friend, the Command Post, or whatever the piece of action in hand calls for Some live the scene through verbally and emotionally, without the production of much motor activity They talk to unseen buddies, wince at unheard explosions, bury their heads under the pillow when the shells come close, and flatten themselves out on the bed, as if they were in the bottom of their foxhole

"The terror exhibited in the moments of supreme danger, such as at the imminent explosion of shells, the death of a friend before the patient's eyes, the absence of cover under a heavy dive-bombing attack, is electrifying to



Stills from the U S Signal Corps film *Let There Be Light*

These pictures show the sequence of events in one of the neuropsychiatric casualty cases in the Armed Services, during World War II, filmed by the United States Signal Corps This soldier suffered a conversion reaction involving hysterical lameness (left), partly precipitated by conflicts related to his family situation Given an injection of sodium pentothal, he was directed by the psychiatrist to walk, which he now found himself able to do, much to his own surprise This dramatic removal of symptoms did not constitute a cure, but paved the way for intensive psychotherapy, the success of which is shown in the patient's increased maturity and independence and in his ability to participate wholeheartedly and competently in a baseball game which formed part of the total therapeutic program

watch The body becomes increasingly tense and rigid, the eyes widen and the pupils dilate, while the skin becomes covered with fine perspiration The hands move about convulsively, seeking a weapon, or a friend to share the danger. The breathing becomes incredibly rapid and shallow. The intensity of the emotion sometimes becomes unbearable, and frequently at the height of the reaction, there is a collapse and the patient falls back in bed and remains quiet for a few minutes, usually to resume the story at a more neutral point Some patients return over and over again to one short, traumatic scene, living it through repeatedly, as if, like a needle traveling around a cracked record, they could not get past this point" (p 80)

By reliving the traumatic battle experience, the patient discharges much of the emotional tension connected with it, and with the aid of suggestions from the therapist is enabled to view his experience in a less traumatic light and to assimilate or "synthesize" it into his ego structure This may involve repeated narcosis interviews in which there is a gradual release of the repressed emotions.

This is well brought out in the case of an infantry officer who had been under severe mortar fire in the Kairouan Pass

"The patient was agitated and trembled constantly His face betrayed persistent fright and bewilderment. He was unable to talk, producing only syllables in a whisper or a low voice. He could not give his name and was apparently unable to recall what had happened to him, or even to make the effort to recall His only word was 'Who?' He started with terror at any sudden noise or any unexpected motion made toward him by attendants." (Grinker and Spiegel[15], pp 7-8)

(In his first narcosis interview the patient was told that he was in the Kairouan Pass, and that mortar shells were dropping about him)

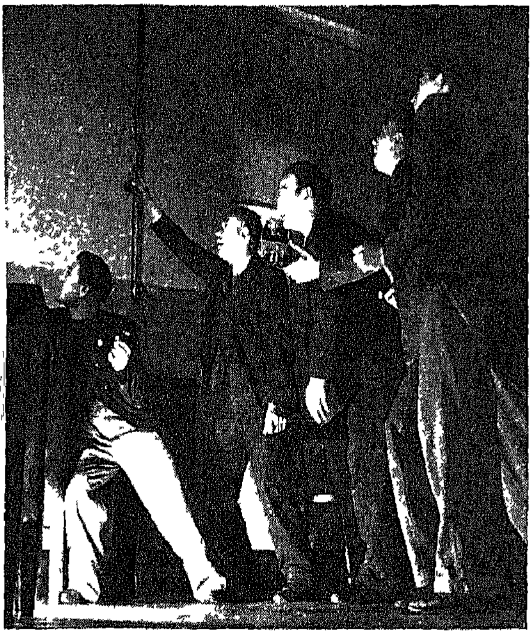
"At the mention of the word 'shells,' he shuddered . He then spat on the floor—i e the battlefield—and got out of bed, crying 'Steve! Steve, are you all right?' He knelt on the floor and passed his hands over it, as if examining a body. Standing up suddenly, he looked as if he were going to cry, and buried his face in his hands. Then he clenched his fists and, assuming a bel-

ligerent attitude, he smiled grimly and said, 'Never mind, I'll get even with those bastards. Those bastards! I'll kill them!' He began pacing up and down, and then suddenly looked up and said, 'Got to find Steve Got to find Steve and Davey' He then lurched about the room, looking for something, from time to time he cowered, as if hearing an approaching shell, and then, trembling with fear, crouched on the ground, as he might in his foxhole He did not appear to find what he was looking for, and eventually began the whole scene over again with the two-people-killed episode" (p. 98)

(Although the therapist kept talking to the patient in an attempt to maintain contact, the patient appeared bewildered by his failure to find his friends and was taken back to the ward still puzzled and amnesic. However, speech had been recovered and considerable emotional catharsis had taken place, leading to a reduction in anxiety In his second interview, he again began to talk of his battle experience but now in the past tense with awareness that he was telling the therapist a story)

"We'd been pinned down in our foxholes all day. Jerry had us spotted, and was throwing mortars at us. I was terribly frightened, but I tried not to show it in front of the men I had trouble keeping them in their foxholes They wanted to get out and stretch every few hours When anyone stood up, five or six mortar shells came over in a few seconds We didn't know where the German batteries were located, couldn't find out The shells came from nowhere, not a sign of a gun, not even a flash I saw two men standing up out of their foxholes I climbed out of mine to order them back into their hole Just then a mortar came over and landed in a foxhole near me. Oh, that explosion! It knocked me down, but I got right up, and went over to the hole Two men were in there, our First Sergeant and a Staff Sergeant. I could hardly look at them. The First Sergeant was on top. He was dead, with his head blown open There wasn't any top to his head The other man was underneath He was still alive, but the side of his chest was open, and I could see part of the lung. He was crying, God, I can still hear him crying I felt sick, and my mind was funny, I couldn't think I was shaking so I could hardly move I don't know how I did it, but I helped take care of them I told myself I had to hang on I tried to get a grip on myself The shells were falling all around us Then I saw a gunflash I knew where the German batteries were by the gunflash. Stevie was at the Command Post. I had to go find him, to tell him about the position so he could phone the artillery I went down the road to look for him. But I had to keep ducking down on the ground because the shells kept falling near me, I think the Germans could see me going down the road But I couldn't find Steve I never got to the Command Post. What happened to me? I remember. While I was going down the road, I heard three shells coming I jumped into the ditch, it was a good ditch One of the shells, the first one, landed on the road. I can still hear the sound of the shells whirr Don't you hear it? Oh, what a sound! I don't want to ever hear that sound again I can't go back to the front, I can't take it again. I remember the second shell landing behind me, off the side of the road I don't remember the third I don't remember what happened after that Oh, those shells! They weren't mortars you can hear mortars tumbling over and over This was a whirr" At this point the patient covered his eyes with his hands, and buried his head on the medical officer's shoulder Then he suddenly smiled and said, "I remember my name it's F—— I remember where I live God, what a miracle that I can talk. I thought I'd never be able to, but I tried I tried right along to talk and remember, but I couldn't. They must think I'm an awful baby I am a baby to be like this." (pp 99-101)

The response of patients to narcotherapy, particularly in transient personality reactions where we are dealing with relatively stable personalities prior to the acute stress, is thus highly dramatic. The amnesic regain their memories, the mute are able to talk, the deaf can hear, the paralyzed regain the use of the



limbs, and stuporous, apparently psychotic patients become coherent and able to relate their experiences Where the mental illness is based upon long-range pathological trends in the ego structure of the patient as in schizophrenia, narcotherapy has usually proved of lesser value.

In the hands of a skilled therapist, however, narcosis interviews may be used effectively in the release of pent-up emotions, in recovering lost memories, as in neurotic dissociative reactions, in removing the paralyses or other symptoms in conversion reactions, and in the uncovering and working through of deep conflictual material The therapist may also leave suggestions with the patient during the narcosis interview which, like posthypnotic suggestions, tend to be carried out in his later waking state. Both during and following the narcosis interview the therapist aids the patient by means of suggestion, interpretation, and other techniques to re-evaluate and assimilate the traumatic and conflictual material that has been revealed in the course of narcosis interview.

In the use of both hypnosis and narcosis in civilian cases, Murphy and Weinreb[81] again sound a warning note in referring to the training of psychotherapists in a Veterans Administration Hospital

"As an alternative to the residents who 'enlighten' their patients by engaging them in intellectual skirmishes, we have had the revivalist type who were not happy unless down on their knees wrestling with the unconscious for the patient's ego This type liked hypnosis and amytal interviews, preferably highly emotional ones, and hoped that the abreaction of some dark secret moments in the patient's past would effect a miraculous cure . When their 'cures' relapsed, it was felt that either psychotherapy was a hopeless proposition or that there must have been one more secret episode in the patient's past that had been missed" (p 102)



In the sequence of events here portrayed, taken at one of the British Neurosis Centers established during World War II, a psychodramatic episode turned out to be of great diagnostic help as well as therapeutic value Up to this point the patient had been extremely inhibited in group discussion and had not responded to drug analysis or either But in acting out a bombing scene, his story came to light He acted his part with intense emotion (above), and when the scene was over and the fictitious "all clear" sounded, he got up looking genuinely dazed and walked unsteadily away When the others laughed loudly at him, he went into the doctor's office with-

Psychodrama. In psychodrama, as developed by Moreno[29], the patient is encouraged to enact on a stage a life situation or experience relating to his difficulties. The particular situation utilized is suggested either by the therapist or by the patient himself Immediately before the session the situation is briefly outlined—e g, the patient's wife has told him that she is in love with someone else and is leaving him. This merely serves to set the general drama situation, and from here on the patient is on his own, he reenacts the scene spontaneously as he sees fit Before the session starts, the roles of other characters in the scene are given to a supporting cast called "auxiliary egos" An "auxiliary ego" is not a patient, but a person who is trained to play various roles Thus his function is not so much to reproduce a perfect likeness of the absentee, as to stimulate the patient to be realistic and spontaneous Variations of the above procedure, such as "warming up" techniques, are utilized when the situation indicates In the process of acting out, the patient reveals a great deal of his underlying personality organization—his motivations, conflicts, and typical ego defenses But even more important is the cathartic effect upon the patient of the acting out of his conflicts and of traumatic past experiences. Here he may express his fears, his resentments, his feelings of jealousy, his guilt and self-recrimination, and his inner desires that he cannot display in everyday life This material may be later analyzed in interview sessions with the director

Another important value of psychodrama lies in the training patients receive in spontaneity, both in re-meeting old situations and working them through more appropriately and in facing new ones that arise during the dramatic re-enactment with the supporting cast Learning to express oneself easily and spontaneously and to meet new situations effectively as they arise in the dramatic re-enactment has proved of great value in freeing the individual from inhibiting emotional blocks and in promoting greater flexibility and skill in interpersonal relations

1. *Psychodrama with hypnosis or narcosis* An interesting variation on psychodrama procedures is the introduction of hypnosis or



out a word and lay down, finally saying that he felt dazed and overwhelmed, as though he had been a coward Eventually it came out that during an actual bombing he had collapsed, thinking himself hit by a nearby explosion, and that when he had gotten up his gun crew had laughed at him and he had felt they thought him a coward

Psychodrama is typically followed by a general group discussion in which other members of the group talk over the situation just enacted and their own reactions to it Each one, through helping to shoulder the others' problems, develops a new objectivity and self assurance in meeting his own





Through acting out relationships that have been difficult in the patient's past life, he gains new skill and confidence for meeting them

narcosis We have already noted the use of hypnosis and narcosis in encouraging the acting out of traumatic events and conflicts Several therapists, such as Wolberg[45], have emphasized the more formal organization of these dramatic re-enactments to approximate the psychodrama situation Here the therapist and other persons may take an active role in the dramatic scene, becoming the loved mother, the feared father, the hated bully, or other persons appearing in the drama Wolberg feels that the use of hypnosis is particularly valuable here in removing most resistances to dramatics and in reproducing traumatic incidents and emotional scenes with an intensity and vividness that is not usually achieved in the waking state This uncovering and catharsis are then followed up by interview therapy sessions designed to increase insight and emotional re-education

2. *Role playing* A less formal technique which has developed out of the psychodrama approach is "role playing" Here a dramatic situation is chosen and the roles assigned to particular patients Typically four types of situations are chosen, with different goals

a) Reality situations designed to prepare the individual for the type of situation he may meet when he leaves the hospital—perhaps how to handle the stigma attached to mental patients when they are applying for a job

b) Situations designed to encourage group spirit and identification and better patient-personnel understanding. For example, Haber and his colleagues[17] dealt with the problem of ward attendants and nurses not reporting infractions of hospital rules because of friendly feelings for the patients and not wanting to be branded as "stool pigeons" They worked out the following scene

"An aide (played by a patient) greeted a patient just returned from a pass and idly inspected a new portable radio the patient was carrying He opened the back of the compartment and found a bottle of whiskey" (p. 27)

In the ensuing discussion of this problem, the group without exception approved reporting this incident, thus assuring the aides and nurses that the fulfillment of their duty would be understood

c) Situations directed toward the release of pent-up emotions The patient may act out what he would have liked to say to the ward doctor when the latter turned him down for a weekend pass, or he may re-enact an upsetting emotional scene with his wife

d) Situations directed toward the resolution of conflicts and emotional re-education. For example, a passive, overly protected son shows how he would tell his possessive, widowed mother (played by another patient) that he would like to leave home, get a job on his own, and get married A patient who has never been able to express or accept his hostility is encouraged to "role play" a tough guy and to show how he would then handle someone who is taking more than his share of pie. For the first time he finds it possible and permissible to express his real feelings

Through such opportunities for social reality testing, the patient gains insight into the motivations and problems of others as well as his own and develops more satisfactory interpersonal relationships

Group therapy. As we have noted, group psychotherapy is the treatment of the individ-

ual through the medium of the group. It received tremendous impetus during World War II, when sufficient therapists were not available to treat the large number of psychiatric casualties on an individual basis, and it was found to be so effective that Army methods were widely applied in civilian cases with most encouraging results Group therapy is now considered one of our most important therapeutic approaches. It differs primarily from individual therapy in relation to social reality—that is, the group situation with its social give-and-take is much more like real life For this reason it has proved particularly valuable in the more effective socialization of the patient—helping him to realize that others have difficulties similar to his, to become a member of and identify with a group, to find support and assistance in working through his problems, to improve his techniques of interpersonal relations through the group opportunities for social reality testing, and to remove the feelings of isolation to which his inadequacies in all of the preceding areas have contributed In the hands of a skilled therapist, this process eventuates in increased insight and clarification of the self-picture, the resolution of disabling conflicts, greater self-acceptance, and general personality growth toward maturity and independence

Several types of group therapy may be utilized *Activity group therapy,* as formulated by Slavson[38], is designed primarily for children, and involves the use of play and creative activities in helping children to gain emotional release and re-education *Didactic group therapy* consists of more or less formal lectures and discussion conducted by the psychiatrist or psychologist in a sort of classroom approach Unfortunately this approach has been found generally ineffective and is rarely used now except for certain specialized groups of patients Tuberculosis patients, for example, might profit from such a formal, intellectualized discussion of the organic nature of their illness *Interview group therapy,* with which we are primarily concerned, consists of the discussion approach which we have described in our review of individual therapy techniques Here the patients discuss their problems and all members of the group are encouraged to participate

In conducting interview group therapy, the therapist may utilize practically any of the individual techniques which we have reviewed, such as reflection, interpretation, the handling of transference, and so on. Although certain individual therapists attempt to maintain a particular systematic approach, such as the nondirective, in group therapy, most therapists are eclectic, choosing the approach with which they feel most comfortable and the one best suited to the needs of the particular group Group therapy may, of course, be either brief or long-term, and either deep or superficial The average duration of interview group therapy ranges from five to twelve months

1. *Recruitment* There are various methods for the selection of patients for groups These range from the use of diagnostic evaluations to simply working directly with the patients on the ward In general there are two criteria which have proved practical in the selection of patients for group therapy: (1) the patients selected should have a definite desire to be members of a group and to work toward getting well, and (2) the patients should be so selected as to avoid too heterogeneous or too homogeneous a group On the one hand, group members should not be separated by such factors as differences in age, intelligence, and severity of illness to the extent that they have little in common and are isolated from each other. For example, in clinical practice it has been found therapeutically ineffective to mix severe psychotics with neurotics or to permit any patient to enter a group when there are basic disparities which will tend to isolate him from the group On the other hand, it has been found advisable not to select patients who are too homogeneous, because they do not have the maturing experience of working in a

broader social context, nor do they seem to maintain discussions and good group interaction

2. *Physical arrangement* Although group therapy may be carried on directly in the ward with little or no formal attention to physical arrangements, it is more commonly conducted in a separate room, preferably small and reasonably comfortable and quiet Group therapy may of course be utilized in outpatient clinics and private practice as well as in a hospital setting The sessions usually last for an hour and a half and are typically held one to three times a week. Again, of course, there may be variations—some groups prefer to meet for only an hour, others for two hours Ordinarily the most effective seating arrangement is a semicircle, sometimes with the patients sitting around a table. Although groups may vary considerably in size, the optimal number for most group therapy has been found to approximate the range of six to eight members in the group at a time.

3. *Functions of the therapist* Among the primary functions of the therapist are (1) the provision of a therapeutic atmosphere, including structuring the group in terms of its aims and limits and maintaining an accepting and permissive atmosphere, (2) promoting unity, so that the group becomes a focal and stabilizing point in the therapy situation, and so that each patient may identify with the group, (3) encouraging and to some extent directing group interaction in order to maintain it along therapeutic channels, and (4) recording and evaluating procedures and results The latter includes the maintenance of some systematic records of the group-interview sessions which can be used for purposes of clinical evaluation

In some groups a co-therapist or recorder is used Although some recorders participate actively in the discussions along with the therapist, it is usually the function of the recorder simply to keep records of the group interaction, and toward the latter part of the therapy session to summarize to the group what has been going on Where the recorder is of opposite sex to the therapist it is often thought that the therapy group tends to recreate the original family constellation of father, mother, and siblings Here it is interesting to note how important it is for the therapist and recorder to coordinate their efforts and function as a team, since the alternative is usually rivalry for the group, with premature interpretations and generally contradictory approaches, much as in many families In passing it may be noted that the use of recorders or co-therapists is particularly helpful in the training of therapists, for once the recorder has participated in a group over a period of time he can then take over the group or form a group of his own

4 *Group interaction* The interaction of patients in group therapy is a fascinating process to watch There is a give and take of hostility, warmth, fear, support, rejection, and the myriad other social aspects of group behavior Again, as in individual therapy, the interaction may take place on a relatively superficial and surface level or it may involve the working through of deep emotional conflicts of the various members of the group In groups that are functioning effectively, the members usually find the group membership a most interesting and satisfying experience and look forward to their group-therapy hours. Often patients will even come half an hour or more ahead of time and wait for the therapist and the other members to arrive.

In general, the course of group interaction or therapy is similar to that in individual therapy, going from the expression of hostility and negative feelings through emotional insight to positive actions and growth

The following is taken from the third meeting of a group therapy series. The group consisted of six hospitalized patients, all diagnosed as psychotics

Bill It's sure noisy around here. I wish they would get the repairs on that building com-

pleted Say, you don't look too happy today, John, what happened to you?

John I'm mad at someone, but I'm damned if I'll tell about it

Therapist You are very angry but you don't feel that you want to discuss it in the group

John. Maybe I should There's some guy who's been making a purse for my mother He bragged to me about his purse making and I got sold on it and gave him $5 00 to make one for my mother He hasn't made the purse and he won't give me my five bucks back He's making a damned fool out of me What should I do?

Bill· Have a show-down You didn't do anything wrong Why should you suffer?

Clarence. Go to the nurse She has a powerful influence Or maybe the ward doctor could help you

Bill This isn't solving the problem for himself

Charles The ward doctor couldn't help you, he's crazier than I am. He has it in for me . (wanders off incoherently muttering about doctors having proved themselves unworthy of being doctors)

John Just the thought of it makes me so damned mad

Bill Try to help yourself Don't get aggravated Do something about it

John You're right. I'm going to do something about it right now I'm going to be excused for 15 minutes (walks out).

John (Re-enters very nervously) I'm going to get my purse back this afternoon It's not finished, but I'm going to get it back

Bill What happened? Would you like to tell us about it?

John Yes, I would I asked him why he hadn't finished the purse He said I had kidded the nurse out of the leather that I gave him to make it with I told him that was none of his business He didn't want to finish it on that account I told him I wanted the purse back whether it was finished or not He said he had already put more than $5 00 worth of work in on it I told him I'd see whether I thought there was $5 00 worth on it or not Hell, he hadn't done hardly nothing on it It sure does burn me up

Therapist You feel that he has taken advantage of you and you are hurt and angry

John Yes, it sure makes me mad I was looking for an excuse to hit him I'd have derived more satisfaction from batting his damned head in—no doubt about that It makes me so mad I'm sick. Makes my blood pressure so high Could I take him to a doctor? Make him explain to the doctor? Let me go back a little and explain The guy had a date to go out and no money I went to the paymaster and drew money Now just the thought that the guy is laughing at me makes me so mad I could . .

Clarence Why don't you go up and tell him to pay the $5 00 or you'll go to the doctor?

Bill Yeah, maybe that's a good idea.

Charles The doctors have made me crazy they have jumped on me trying to get my money . . they are torturing me for my money (disconnected, incoherent, almost inaudible muttering to the effect that he advises the doctors to give themselves up to a government bureau)

John I can't sleep until I decide what can be done I'm going to get that guy—I may wait until a dark night Every waking moment that's all I think of

Bill Try going to Dr P—— If that doesn't work, take a swing at him

John It causes me discomfort and I take it out on other people

Mack. It's not really the five dollars that's so important, it's what it means to you

John That s o b can't do me that way and get by with it

Therapist You feel ashamed because you trusted this fellow and he deceived you

John I feel about two inches high

Mack I know how I feel in similar situations I feel hurt, and so damned frustrated—things I know I wouldn't do I see others do without shame I continue doing right, and they get away with doing wrong

John I can't let this guy get by with that. It's



It is generally recognized now that if mental health is to be regained, patients must develop active interests Even where facilities and personnel are extremely limited much can be done to turn idleness to constructive activity wherein patients can develop skills in keeping with their abilities

like when I loaned a guy $250 and he didn't pay it back and I took it out on myself.

Therapist It's as if this were the last straw in a lot of things that have happened to you

John Yes, I want to be my cheerful self instead of snapping at people I used to feel that I was too easy-going I can't take that stuff any longer. That's why I never got ahead in this world I take it I store it up inside of myself

Therapist Isn't it a step forward that you tell us how you feel?

John. (Ignoring therapist's comment) Talk all night, even in my sleep.

Mack It seems like it keeps building up and building up, doesn't it?

John: All these things I've stored up. I'm taking it out on him I'm going to get that s.o b So help me I'm going to I want to get a club and beat that s o.b until he's unrecognizable I'm going to do it

Therapist I think we all understand your feelings You're so angry you can't put it into words

Mack: I hate to see that guy make you feel the way you do now.

Bill You're mad because you don't know how to handle the situation The thing to do is to calm down and work out a solution.

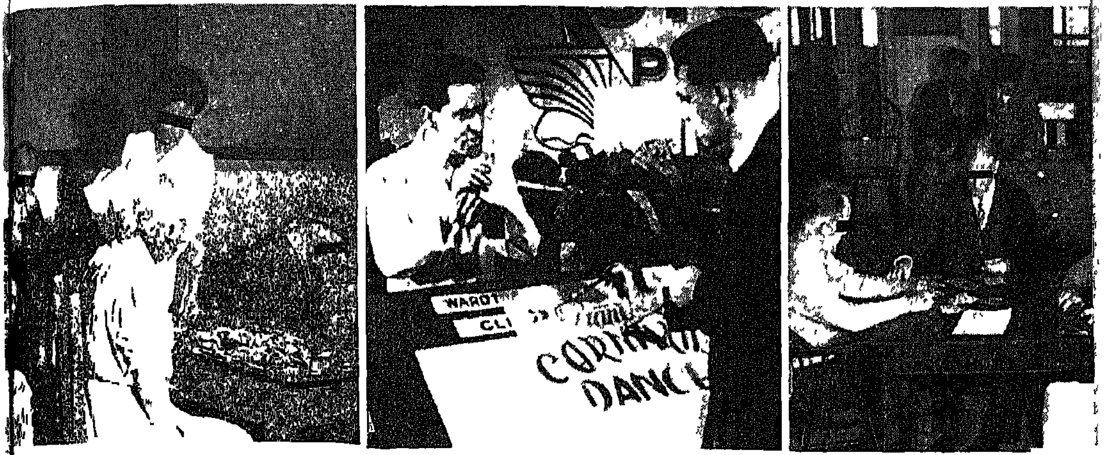
John I can't let it drop.

Bill Calm down and work out a solution

John Yes, you're right, just getting mad won't do any good . the thing to do is to find a solution to problems like this

In this group of patients, only Charles is obviously so disturbed that he cannot profit immediately from the group interaction. Over a period of time, however, he did make a satisfactory adjustment in the group and showed considerable improvement although not sufficient to justify his discharge from the hospital Although the other patients are classified as psychotics, and much of their conversation in dealing with John's problem reveals their immaturity and ineffective approaches to the handling of a relatively simple problem, they do not show acute psychotic symptoms in this excerpt of the group interaction These patients showed marked improvement in the course of their work in the group, and all but Charles were eventually discharged from the hospital as recovered.

5. *Termination* The termination of group therapy is very much like that in individual therapy It may take place either (1) where the patient has shown therapeutic improvement or recovery, or (2) where there has not been recovery or improvement, because of the



unsuitability of the patient for the particular group or even group therapy In the latter case the patient may be a disruptive influence in the group, or may be severely traumatized by the group and unable to identify himself with it

In all terminations it is important to leave the way open for the patient to return to the group or to receive other therapeutic assistance if it should be necessary in the course of his later adjustments To facilitate this where patients are being discharged from the hospital, transitional or post-hospital groups of an outpatient nature are sometimes maintained over a long period of time, but meeting less frequently, to help the patients through the transition period from hospitalization to outside life adjustments

The procedures and results of group therapy are undergoing experimental evaluation, and it is still premature to draw conclusions about its range of effective use However, it has already shown promising results not only with transient personality reactions but with both neurotics and psychotics This does not mean that it is a substitute for individual therapy or that it will replace individual therapy. Rather it is an extension of our therapeutic armament and in combination with individual therapy provides a potent approach for dealing with a wide range of personality maladjustments.

Psychotherapeutic aids. There are a number of procedures which have proved of considerable psychotherapeutic value, but which usually serve as adjuncts or aids to the general therapeutic process We may conveniently consider these under the general headings of educational therapy, occupational and recreational therapy, and hospitalization as therapy

1. *Educational therapy* All therapy is in a general sense educational, for it is aimed at the emotional re-education of the patient, but we are primarily concerned here with various specific educational procedures.

a) BIBLIOTHERAPY Books, pamphlets, and other reading material are often of considerable assistance in helping the patient to realize that others have similar problems and in the development of self-understanding Often, in reading either fiction or nonfiction, the patient will exclaim, "Why, that's exactly my problem!" His statement may or may not be correct, but it shows what he thinks his problem is and may be readily utilized for therapeutic purposes The reading material is usually selected in terms of the needs and intellectual abilities of the patient. Books such as Liebman's *Peace of Mind*[22] which are both interesting and relatively easy reading, are commonly used as starting points in bibliotherapy.

b) AUDIO-VISUAL AIDS An increasing num-

ber of very fine psychiatric films have been made available in recent years These films, such as *Let There Be Light,* made by the Army in World War II, and *The Feeling of Hostility,* produced by the National Film Board of Canada, show the factors underlying the development of unhealthy reaction patterns in a vivid and dramatic way that is particularly useful in promoting insight and some measure of emotional re-education. Although such films are commonly used in a group setting, there is no reason why they cannot also be utilized with individual patients

c) FORMAL EDUCATIONAL PROCEDURES This approach to therapy is a far cry from the formal, didactic educational lectures on various mental disorders which were found to be so ineffective. It consists in the learning of various social skills such as dancing, dressing in good taste, managing finances, bowling or playing tennis, and so on. On a more academic level, many hospitals have classes in English, mathematics, and other subjects which the patients can take for high-school credit, college credits are often available also by means of extension courses Although some educational procedures help the individual to acquire necessary social skills and fill in deficits in his formal education, a large measure of their therapeutic value lies in making the patient's hospital stay more pleasant, in the encouragement they give toward self-expression and creative production, and in increased socialization

2. *Occupational and recreational therapy* The use of occupational and recreational activities in psychotherapy has been found of great value. These include

a) SOCIAL EVENTS. Many hospitals have a regular calendar of social events including dancing, teas, theatrical productions, often put on by touring movie and theatrical people, and so on These events have proved of value in helping the patients to meet others and in removing their feelings of isolation. Particularly valuable also are the removal of feelings of being in a different world completely divorced from the outside world, the development of skills in interpersonal relationships, and the general socialization so important for patients who are isolated and withdrawn

b) ATHLETICS. In addition to the many hospital social events, there are usually also regularly scheduled athletic events in which the patients may participate. These include softball, basketball, baseball, and other team sports. Where such facilities are available a program of appropriate athletic activities is usually worked out to meet the needs of each patient For example, softball may be prescribed for its beneficial effects of physical activity and for the opportunity it affords players of working as a member of a team. Also, of course, in team competition on a friendly basis, the patient is enabled to mature in the handling of wins and losses and in meeting competitive situations, which will form an inevitable part of his later life outside the hospital

c) MUSICAL THERAPY. Closely allied to the preceding topics but deserving mention in its own right is the use of music in therapy. From time immemorial, music has been used for achieving a variety of emotional effects Its soothing qualities are emphasized in lullabies and its emotionally exciting qualities in primitive and modern dance and martial music As in other recreational therapy the patient may be encouraged to learn to express himself via a particular musical instrument or the therapist may try to modify excited or depressed emotional states in the patient by means of soothing or stimulating music, as the case may be.

Mitchell and Zanker[28] applied music as a technique in group therapy and found it of definite value in increasing group cohesion and interpersonal relationships, and in fostering emotional release and facilitating better personality integration Interestingly enough, they found that traditional music and folk songs were most effective in producing these

results However, music therapy is still in its infancy and much experimental checking needs to be done before its full potential in psychotherapy can be utilized.

d) ART PRODUCTIONS. Fingerpainting, clay sculpturing, and other art media have proved outstandingly successful as therapeutic adjuncts They serve in the release of feelings as well as providing the patient with the feeling of pride and accomplishment that comes from personal expression in creative activity. Many of these art productions are of excellent caliber and are often placed on exhibit in various locations throughout the hospital.

3. *Hospitalization as psychotherapy* Hospitalization itself, aside from its value in enabling the patient to obtain medical and psychological therapy, is often of considerable psychotherapeutic value in its own right. It may remove the patient from a hopelessly frustrating life situation and give him a breathing spell and a chance to strengthen his ego defenses in a sheltered environment In addition, it provides the patient with a regimen of his activities, including proper diet, rest, and exercise We shall consider the mental hospital and clinic in more detail in the course of our discussion

Many other specific psychotherapeutic techniques are worthy of mention here, including *relaxation therapy,* in which the tension of the patient is itself directly attacked rather than the causes leading to the tension, and *semantics,* in which the emphasis is on the importance of a proper understanding of the role of symbols and language in the shaping of our attitudes and our emotional reactions

It should be apparent from the number of the procedures listed as "psychotherapeutic aids" that practically all of the life activities and interpersonal relationships of the patient have some effect upon his personality functioning and may be systematically utilized for psychotherapeutic purposes.

Techniques that have proved ineffective. In concluding our discussion of therapeutic techniques, it is perhaps of value to mention briefly certain techniques which have proved generally ineffective in psychotherapy and have for the most part fallen into disuse. Rogers[35] has well summarized these older methods among those he lists are (1) exhortation, (2) moral suasion, (3) advice, and (4) reassurance.

1. *Exhortation* Here it was usually the practice to get the patient "worked up" emotionally to a point where he would sign a pledge to stop masturbating, or drinking, or stealing, or a pledge to work hard, and so on In a sense it consisted of attempting to create a temporary emotional upsurge and then trying to "peg" the patient on this level As we might expect, the almost inevitable outcome was a relapse

2. *Moral suasion* Here it was usually the practice to appeal to the patient's "better side" or "manfulness" or sense of "right." Thus, by making his alcoholism or homosexuality or other activities a moral issue, the patient was made to feel that it was up to him to fight this sinfulness and achieve his "salvation" Again, as we might suspect, this method not only was ineffective in most cases, but often intensified the patient's conflicts

3. *Advice* From time immemorial, people have gone to wise men or specialists for information and advice on their problems In medical problems, legal difficulties, and other situations where the client is in need of a specialist, advice is still a perfectly acceptable and widely used method However, advice in psychotherapy should be used with caution Under certain conditions, particularly toward the end of a therapeutic relationship, it is possible that advice is valuable when it is concerned with certain specific problems or suggested positive actions However, in giving advice the therapist takes considerable responsibility on his shoulders, and reduces the initiative and growth of the patient It is usually much better for the therapist to assist the patient in clarifying the issues in a particular problem, and then let the patient take the initiative in working out his solution.

In addition, advice, like intellectualized interpretations, usually produces little change in the patient's symptoms or behavior For example, advising a neurasthenic that he is not physically fatigued and should "buck up and snap out of it" has proved worse than useless. Similarly, it is futile to explain to an alcoholic that he is running away from his problems and that what he needs to do is to work out more realistic methods of meeting them. Even if the therapist outlines what these methods are, such as perhaps taking courses in night school to prepare himself for a better job, the patient will still in all probability be unable to follow the doctor's "prescription" Often the patient himself knows what he should do but lacks the motivation and ability to carry it out. Consequently, although advice may work in occasional instances and may even be desirable under certain circumstances, it has generally proved ineffective. Only through emotional re-education is a change apt to take place

4. *Reassurance* Another technique which is of value under certain conditions but which has been overworked and largely discarded is reassurance It is important that the therapist not permit the therapeutic atmosphere to become gloomy, which would be discouraging to both the patient and the therapist On the other hand, ill-based optimism and superficial cheeriness with comments like "We'll have you well in no time at all" are equally misplaced The value of reassurance is in helping the patient to feel that he can be accepted and loved and helped. But this type of reassurance is best achieved by the actions of the therapist and not by verbalizations It is a case in point of the old motto about actions speaking louder than words.

MAJOR SYSTEMATIC APPROACHES TO PSYCHOTHERAPY

As we noted in our historical introduction, individual differences in the therapeutic approaches of different therapists are gradually coming to obliterate systematic* or "school" differences Thus there is often a greater variation from one psychoanalyst to another in the use of concepts and techniques than there is between the psychoanalysts and the psychobiologists as groups. Of course, there are still cliques who follow closely what they consider to be the "party line," but in general, the trend is toward the acceptance or rejection of concepts in the light of their experimental evaluation and toward flexibility in the planning of therapy around the needs of the individual patient.

CLIENT-CENTERED (NONDIRECTIVE) PSYCHOTHERAPY

It is convenient to begin our discussion of systematic approaches to psychotherapy with the so-called "client-centered" or "nondirective" approach, formulated by Carl Rogers[95], which we described briefly earlier in this chapter. This approach places the primary responsibility for the direction and fruition of therapy upon the client or patient, relying heavily upon the individual's drive toward growth, health, and adjustment—a drive which has presumably been thwarted by various emotional conflicts or blocks. Therapy is thus primarily aimed at the removal of the emotional blocks and the freeing of the individual for normal personality growth. Since the patient bears so much of the responsibility in this therapeutic approach, client-centered therapy, as we have seen, has been utilized mainly with relatively stable persons who have the intellectual capacity and personality integration requisite for working with their problems

The therapeutic process itself Rogers considers to be a rather orderly and predictable matter typically following five steps·

* The term *systematic* here means that these approaches are based largely upon particular theories or "systems," of personality dynamics which emphasize certain therapeutic dimensions and techniques

1. The client comes for help. This is considered an important step in the therapy situation, for the individual has, as it were, taken himself in hand and on his own initiative taken the first step toward finding a solution to his problems Thus Rogers feels that nondirective counseling is likely to be most effective where the patient is under sufficient psychological distress from his conflicts to wish to do something about them and take active steps in that direction.

During the first interview with the patient the therapeutic situation is defined The counselor makes it clear that he does not have all the answers but that "the counseling situation does provide a place where the patient can, with assistance, work out his own solutions to his problems" (Rogers[35], p. 33)

2. Expression of feeling. By his permissive and accepting attitude, the therapist encourages the free expression of feelings, and now the negative and hostile emotions that have been bottled up inside the patient are permitted at last to come out into the open. In a case reported by Rogers[35], the patient says.

> "There's nothing I feel I can do about it, except I'm disliked by a couple of the fellows who are more active than I am and who are liked by the majority of the other fellows—they are maybe not liked, but they are not disliked And, therefore, I'm kind of disgusted with the whole fraternity and I just don't give a damn what happens to them, and if I can get my meal down there, my evening meal, just as cheap as anywhere else and get a better meal, I'll go down there! And I'll go to their dances and—not for the love of the dear old fraternity (very scornfully), but merely for my own enjoyment" (p. 139)

As these hostile and negative emotions come spilling into the open, it is the counselor's function to accept, recognize, and clarify the feelings underlying the patient's problems and attitudes, which are really of far more importance than the verbal content of his statement, and to do so in such a way that the patient, too, can for the first time recognize these negative feelings for what they are and accept them as part of himself rather than repressing them or hiding them behind various other defense mechanisms

When the patient's negative feelings have been fully expressed, they are followed by faint and tentative expressions of positive feelings In the excerpt below, the same patient is speaking

> "However, it is damned depressing sometimes (laugh) if you don't have the right attitude Some days you wished you lived there and were—really had that intimate association with the fellows " (Rogers[35], p 139)

These positive feelings likewise are recognized, clarified, and accepted without praise or blame in such a way that the patient can accept them, too, as part of himself without the need to feel defensive about them.

3. Development of insight. Gradually this increased recognition and acceptance of the real self leads to the development of insight or understanding As Rogers and Wallen* express it, "This process might be likened to removing colored glasses from the client's eyes At first his perception of his situation is distorted by the emotional attitudes that keep him under tension and stress" As his feelings are released and clarified, however, "he is enabled to see himself and his environment in a truer perspective" (p 50) Among the more important elements of insight emphasized by Rogers and Wallen are: "(1) recognition and emotional acceptance of the real attitudes and desires of the self, (2) a clearer understanding of the causes behind one's behavior, (3) a fresh perception of the life situation—old facts are interpreted in a new frame of reference—and (4) clarification of the decisions that must be made and the possible courses of action" (p 54)

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* From *Counseling with Returned Servicemen* by Rogers and Wallen Copyright, 1946 Courtesy of McGraw-Hill Book Co

4. Positive steps. Intermingled with and following the gradual development of insight is the clarification of possible decisions and possible courses of action. Often this is infused with a rather hopeless attitude in which the client sees his situation and himself more clearly but still does not know what to do about it. As the possible courses of action become clarified, however, the client begins tentatively to consider various steps that he must take. Again it is the function of the counselor to recognize and clarify and not to attempt to lead the client.

"An extremely withdrawn high-school boy, who has expressed his fear and hatred of others and has also come to recognize his deeply buried desire to have friends, spends a whole hour giving all the reasons why he would be too terrified to accept a social invitation he has had He even leaves the office saying he will probably not go He is not urged It is sympathetically recognized that such action would take a great deal of courage, and that while he wishes he had such fortitude, he may not be able to take such a step He goes to the party, and is enormously helped in his self-confidence." (Rogers[35], p 41)

Although the first positive steps worked out by the client may not be dramatic, they are stepping stones in the right direction and with time, as these minor positive actions bring satisfaction and increased feelings of adequacy and self-assurance, the client moves toward positive growth and development.

5. Ending the contacts. As the client graduates from fearful and tentatively undertaken positive actions to an increasingly confident integration of positive actions and self-directed action, there is a feeling of decreasing need for help and a recognition on the part of the client that the therapeutic relationship must end The decision to terminate, like the earlier decisions to attempt positive actions, comes from the client By terminating the contacts under his own initiative, he has taken the final step toward independence For he has now assumed a full measure of responsibility for his life situation.

This general sketch of nondirective psychotherapy or counseling serves to show its general nature. Its most marked differences from other systematic approaches are (1) the high level of responsibility for the direction and fruition of the therapy which is placed upon the client, (2) the restriction of the therapist's role primarily to the acceptance, reflection, and clarification of feeling; (3) minimizing the transference between therapist and patient, thus making it unnecessary to handle complicated transference relationships; (4) de-emphasis on diagnostic psychological tests (Rogers[35] feels that psychological tests are ordinarily unnecessary and merely take up time that could be more profitably devoted to working directly with the patient's problems), and (5) permitting the therapy to proceed at the pace set by the client, which is presumably a safeguard, in that he will discuss and work through his conflicts as his ego strength permits.

Therapists relying primarily upon a nondirective approach to therapy feel that the achievement of insight and positive action through the initiative of the patient is of more value than if the initiative is taken by the therapist. It is thought to be a more effective growth experience for the patient—one that utilizes his own potentialities for growth to a greater extent and thus one that will assist him to become able to cope successfully not only with his present problems but with those that come up later. Therapists who tend to more directive approaches agree that the patient's inner potentialities for growth should be relied upon and utilized as fully as possible, but feel this growth process can often be facilitated by appropriate interpretations and other more directive procedures.

Although nondirective counseling has been found of great value in the treatment of minor personality maladjustments, its usefulness with more severely disturbed patients is as yet a controversial matter However,

there is accumulating clinical evidence to indicate that its range of effectiveness is greater in both individual and group therapy than was at first supposed

The following interview material from a case record* will serve to illustrate the general nature of nondirective psychotherapy

"L H was a discharged servicemen who had seen three years of army service, two of them overseas He had been wounded by a shell fragment in his leg and after recovery had been assigned to an isolated overseas post He was eventually classified as psychoneurotic and discharged He was employed in a war plant, but was a problem to his supervisor because of his restlessness and nervous behavior Two weeks after he had been employed, in a casual contact with the industrial counselor on the job, L H said that he felt 'all tied up inside' and that he had about decided to quit The counselor told L H that he was always available to any employee who wished to talk things over and invited him to come to his office at any time .

"L H appeared at the counselor's office the next day. He appeared tense, never smiled, seemed very serious and unhappy. He was somewhat inarticulate and found it difficult to put his thoughts into words Portions of the first two interviews are reported here from the counselor's notes Each item is numbered for easy reference.

"First Interview

1 L H. I don't know what's the matter with me I just can't seem to settle down I don't like to stick to anything This job I've got should be all right for me, but I can hardly stand it to keep on working

2 Counselor· You're worried and upset because you can't buckle down to whatever you start to do

3 L.H That's right—I get all upset—I—I always seem to remember what happened to me in the army I really went through hell!

4 Counselor You feel you really had a very tough time while in the army.

5 L H I'll say I did (Pause) Well, the first few years weren't so bad, but the last year was terrible Nobody had any use for me, and my commanding officer rode me something awful —you can't imagine how it was

6 Counselor· You feel that quite a few people had it in for you

7 L H Yes, that's putting it mildly. It got so bad that they were always calling me vile names and I had to fight for any rights I wanted, and then finally I was wounded and got away from all that

8 Counselor It was almost a relief to you to be wounded and get away from all the things you went through

9. L H Yes, it was (Pause) But the pay-off to all this came when an army doctor got hold of me I told him a lot of very, very personal things that had no concern with the army. He betrayed my trust and told my commanding officer all that I had confided in him I could have *killed* him for that! I had a bad time telling anybody anything after that. (Pause.) But for some reason it seems different with you—you know I wouldn't tell you all this if I didn't trust you

10 Counselor Although the doctor made it hard for you to talk about your feelings, you have some confidence in me

11 L H Yes You know I hated those men so much I could kill them I would just think of all the things I'd like to do to them Maybe that's not right, but that's the way I felt

12. Counselor You feel a little guilty about these intense feelings of hatred, but they were there nevertheless

13 L H Yes—in fact (pause)—I just about did kill a fellow We got in a fight (tells details of the quarrel), and I hit him with a wrench I guess I went out of my head

14 Counselor You feel you lost all control of your emotions for a while

15 L H You know I seem to get relief by just getting this out You're the first person I've ever told that to

* From *Counseling with Returned Servicemen* by Rogers and Wallen Copyright, 1946 Courtesy of McGraw-Hill Book Co

Methods of Therapy: Experimental Evaluation

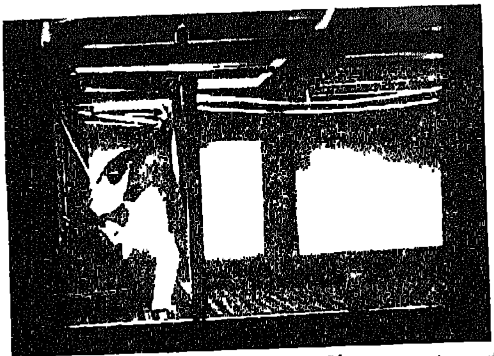
Free experimental research to determine the effects of different methods of therapy is often impossible with human subjects, partly because of the therapist's moral responsibility for the mental health of his patients and partly because of the difficulty of controlling all the relevant factors. Thus our understanding of the dynamics of therapy, like our earlier understanding of the development of neuroses, can be greatly accelerated by studies employing animal subjects, though here again the student must be cautioned against direct application of findings with animals to interpretation of human behavior.

In a study by Dr. Jules Masserman at the University of Chicago, cats made experimentally neurotic (see page 165) were given different types of therapy, some of them roughly analogous to some of the methods now in use with human patients. Four of the approaches are described on this page. The results were found to vary considerably with the different types of therapy.

The period between the establishment of the neuroses and the beginning of therapy had ranged from two weeks to five months. In only seven cases out of the total of thirty-seven was there any alleviation of the symptoms following this rest period and here there was much less improvement than with the more active methods of therapy that followed. (from Masserman[26], Behavior and Neurosis.)

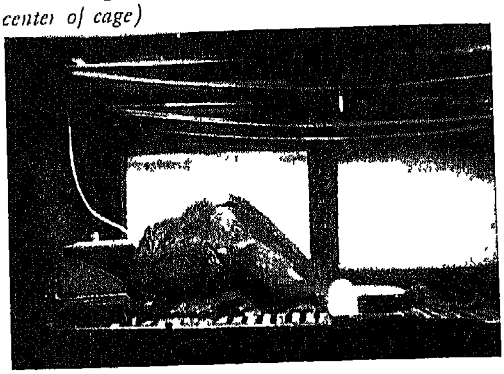


REASSURANCE AND PERSUASION *through "transference relationships." Neurotic animals could be induced, by petting and gentle handling, to take food from the box again, though early in the retraining they stopped feeding immediately if the petting was stopped or if the conditional sound or light signals were given.*

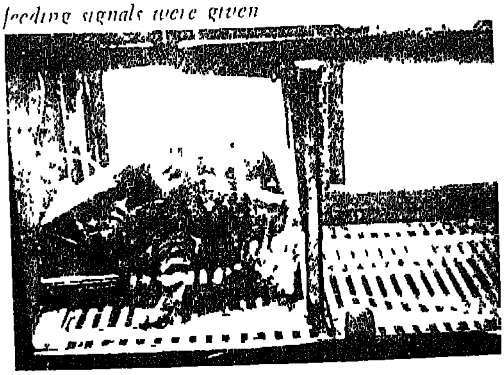


ENVIRONMENTAL MANIPULATION. *If a neurotic cat was forced close to the open box full of food when he was sufficiently hungry he would first try strenuously to escape but would eventually break through his inhibitions and anxieties and start to eat.*

WORKING THROUGH. *A cat given partial control of the situation by being allowed to work its own feeding signals would eventually retrain itself to feed even during an air-blast (indicated by pilot light in center of cage).*



SOCIAL EXAMPLE. *In the presence of a normal cage mate, the neurotic cat gradually overcame fear and began to feed; feeding stopped, however, if the normal cat was taken away or if the conditional feeding signals were given.*



16 Counselor It helps you to talk about these things that you have been keeping to yourself

(The remainder of the interview was concerned with other aspects of his problem.)

"Second interview (Following day)

17 L.H I feel pretty bad today—can't seem to figure what's wrong

18. Counselor It disturbs you because you can't get to the bottom of your trouble.

19 L H Yeah, that's it Now take today for instance, everything seemed to go wrong The job I was on didn't turn out right and the foreman got mad, and then I got mad as hell at him. It was all I could do to control myself I wanted to pick up a wrench and I—well—I almost wanted to kill him That's *bad*

20 Counselor It scares you to think that you have such feelings

21 L H Yes, very much—I'm going to tell you something that you're going to think is very strange and I don't want you to tell anybody The other night I was playing with my little nephew, and he started to cry, and then I got the strangest desire that—well I wanted to kill him too! That's *terrible* to feel that way toward a little child that can't defend himself or anything! I can't understand why I feel that way!

22 Counselor It disturbs you a great deal and you feel guilty when you have these feelings of wanting to kill your little nephew

23 L H Yeah, that's it—it seems that I'm full of hate—God, I wish I could get it out of my system! Sometimes it gets to the point where I feel I can't control it That's the way I feel today

24 Counselor You would like to have some way of getting rid of these feelings of hostility so that they wouldn't control you anymore

25 L H Yes—in some way where it wouldn't hurt anybody. (Pause.) You know this talking about it helps a lot

26 Counselor It helps to sort of talk it out.

27 L H That's right

(The interview continues on other issues)

"In five interviews this ex-serviceman made sufficient progress so that he felt, 'I can go along on my own now' He came to realize, 'Maybe I was sort of to blame too when I got into trouble in the army' He gained significant release of his hostile feelings He worked out some of his problems in relation to girls, about which he had been disturbed. He continued to work for this firm for nine months and left to open a small machine shop of his own His industrial adjustment was greatly improved, and though he came in to talk with the counselor occasionally, his attitude was much more constructive, and he showed self-assurance and a freedom from guilt that was in marked contrast to his first contact." (Rogers and Wallen[36], pp. 61-65)

ANALYTIC (PSYCHOANALYTIC) PSYCHOTHERAPY

In Chapter 2 we noted the influence of psychoanalysis upon the development of modern psychological and psychiatric thought and its permeation of other fields such as anthropology, sociology, and literature Criticisms of psychoanalysis have, however, remained rather persistent, and the average clinician working in the field has often found it extremely difficult to think his way through the maze of controversy surrounding psychoanalytic concepts and procedures

Perhaps a good starting point for our own discussion is to point out that modern analytic psychotherapy is not particularly unique or mysterious. It aims at the restructuralization of the patient's personality along lines designed "to increase the patient's ability to find gratification for his subjective needs in ways acceptable both to himself and to the world he lives in, and thus to free him to develop his capacities." (Alexander and French[2], p 26) To achieve these goals.

". we lay stress on the value of designing a *plan of treatment,* based on a dynamic-diagnostic appraisal of the patient's personality and the actual problems he has to solve in his given life conditions In devising such a plan of therapy,

the analyst must decide in each case whether a primarily supportive or uncovering type of treatment is indicated, or whether the therapeutic task is mainly a question of changing the external conditions of the patient's life. . . .

"In addition to the original decision as to the particular sort of strategy to be employed in the treatment of any case, we recommend the *conscious use of various techniques in a flexible manner,* shifting tactics to fit the particular needs of the moment" (pp. 5-6)

The aims and procedures of modern analytic psychotherapy are thus essentially the same as those we have described for modern psychotherapy in general.

Key concepts of modern psychoanalytic therapy. Stripped of its debatable superstructure of unconscious *areas* of the mind and so on, modern analytic psychotherapy is based upon the following essential concepts (Marmor[21]):

1. *Psychic determinism* This is the concept that our psychic phenomena are not determined accidentally and haphazardly but follow cause-and-effect relationships as do other natural phenomena. This means that there are rational explanations for dreams, fantasies, slips of the tongue, lapses of memory, and other thought patterns and sequences

2. *Repression and the unconscious.* This is the concept that there are mental processes of which we are unaware—particularly desires and conflicts which are screened from consciousness by repression and other ego defense mechanisms

3. *Free association and resistance.* As we have seen, the patient's ego defenses tend to protect him from the uncovering of hurtful memories and conflicts, producing what may be referred to as *resistance.* Freud worked out the technique of free association to get around the patient's resistances.

Perhaps the following excerpt taken from a patient's first analytic interview will give a clearer picture of how free association uncovers important material and how resistances arise to protect the ego from further "danger" The patient had been instructed to let his mind wander, uncontrolled, and to express whatever thoughts or feelings came into his mind (The examiner is designated by "E," the patient, by "S.")

"S. The thing uppermost in my mind at present is the hour exam I just had Rather easy exam. I wasn't feeling particularly brilliant this morning I don't know whether I made any mistakes or not. Quite a bit hinges on this exam because I want to get a scholarship for the second semester. If I get it, I will be able to carry through my work to my Master's degree. If I don't, I don't believe I'll be able to make it It's hard to borrow money these days Nobody has much to lend Another thing, it is hardly worth while to borrow much to put you through school because you run yourself into debt that you can hardly ever pay off I knew a girl who went to State College and she has been out four years and she owes $1,700 She is working in a department store for $18 a week Her chances of clearing up the $1,700 are rather small I would like to keep on at college though because with the kind of work I get here I will get the kind of job I want I am particularly interested in research work and this course that I am taking fits me for that.

E · I am afraid you are telling me a story rather than telling me what is coming into your mind (After the first few sentences S has been giving a reasoned statement of his financial position This is contrary to instruction and hence constitutes the first manifestation of resistance.)

S : I have an experiment this afternoon and I'm darned if I know what it is about. (This remark may contain a double meaning. S is wondering what the present session is about, as well as the afternoon's experiment But he has abandoned his first form of resistance, the next topic being a good example of free association)

S. I wonder how my Dad is getting along. He is on his last legs, so to speak Dad and I never got along very well I remember one time when I was a youngster I was supposed to be watching some cows that were grazing near an

orchard I got so interested in reading that I forgot about the cows and they entered the orchard and ate some of the fruit off the trees Dad was angry as the devil He came around the corner and made a bee-line for me and I ran and he, being the old backwoods type, took a healthy swing at me with his foot as I went by and he slipped and nearly broke his arm on the wet grass (At this point S turned way around on the couch to look at E)

E What did you think then when you turned around?

S.· The reason I turned around was to look directly at you

E Why did you want to look directly at me?

S If you are trying to put over a point and look directly at the person it is generally better. In sales work, for instance . (Again S has departed completely from free association to the idea of making a point and selling an argument This is another form of resistance, similar to the first At the same time he has dramatized his feeling toward E Doubtless annoyed because E corrected him on account of his first lapse from the fundamental rule, he thinks of an earlier incident in which he lapsed from duty but eluded his father's wrath and indeed turned the tables by being the cause of his father's hurting himself This line of thought, however, awakens so much anxiety that he has to turn around to make sure that E is not getting angry At this point E again reminds S of the fundamental rule)

S (Long pause) I am to report what comes into my mind and nothing seems to come in. I don't care much for your paintings that you have, or whatever they are

E What don't you like about them?

S · I have disagreeable memories of paintings of that type The framed diploma is a plain-looking thing to have on the wall Is that yours, by the way?

E Tell me what comes into your mind about it.

S I thought it might be yours, but when I look at the inscription it says 'M D ,' so I guess that can't be yours (For a moment S appears to free associate, but he has chosen another method of resistance, that of describing objects in the room Almost at once his feelings betray themselves he criticizes the objects, and leads up to a very neat, indirect way of saying to E, 'You are no doctor')" (White[44], pp 329-331)

4 *Transference* This is the concept that the patient views the therapist in the light of many inappropriate and irrational attitudes which he carries over from his relationships with important persons in his past To the psychoanalyst, it is the very core of therapy, and the factor that makes possible the all-important emotional re-education Alexander[1] describes its function as follows

" . The pathological effect of earlier emotional experiences is corrected by exposing the patient to the same type of emotional conflicts in the therapeutic situation The therapist, however, reacts differently, not as the parents, teachers, relatives, or friends in the past This difference between the therapist's reaction and the original parental reactions is the most fundamental therapeutic factor.

"It is important to realize that the new mastery of an old unresolved conflict in the transference situation becomes possible not only because the intensity of the transference conflict is less than the original conflict—is only a 'shadow play' of the original conflict—but also because the therapist assumes a different attitude from that which the parent assumed toward the child in the original conflict situation The therapist's attitude is objective and understanding—that of a physician trying to help a patient He does not react to the patient's aggression by retaliation or reproach, neither does he gratify the patient's infantile claims for help In this objective atmosphere of positive helpful interest, the patient not only becomes capable of expressing his original tendencies more frankly but can also recognize that his reactions are out of date and no longer adequate responses to his present life situation Once they were in a sense adequate reactions—the reactions of the immature child to existing parental attitudes In other

words, while the patient continues to act according to out-dated earlier patterns, the therapist's reaction strictly conforms to the actual therapeutic situation. This makes the patient's transference behavior a one sided shadow boxing and this gives the therapist unique opportunity not only to have the patient see intellectually, but also to make the patient feel the irrationality of his emotional reactions At the same time, the therapist's understanding attitude not only allows the patient to deal differently with his emotional reactions, but makes such a new settlement necessary The old pattern was not formed in a vacuum—it was the result of the emotional interrelationship between parent and child In fact, it was an attempt at adaptation on the part of the child to parental behavior When one link in this inter-personal relationship is changed—namely the parental response—the patient's reaction becomes senseless In the customary formulation of the dynamics of the treatment, the repetition of the old conflict in the transference was stressed and the similarity of the old conflict-situation and the transference situation emphasized And yet in the difference between the original pathogenic and the therapeutic situations lies the value of the analytical procedure. One must bear in mind that the neurotic patient's attitude is not completely dominated by his neurotic patterns His attitude towards the therapist is a mixture of adequate, reasonable reactions and preformed, rigid, neurotic behavior patterns The free, permissive atmosphere of the therapeutic situation—and primarily the fact that the patient comes for help to a person who does not judge him—encourages the unchecked expression of neurotic attitudes—in place of the early dependent tendencies. Their frustration—since the analyst does not assume the protective parental attitude which the patient unconsciously seeks—provokes the aggressive feelings similar to those the patient felt towards his parents when his unlimited demands were not fulfilled Dependence mixed with resentment, because the therapist does not gratify these dependent wishes to the extent that the patient desires, is the most common emotional ground pattern upon which the individual variations of transference reactions are superimposed At the same time, the patient, like every neurotic, also has reasonable adult attitudes This dividedness in his personality is responsible for what one calls the neurotic conflict. His reasonable realistic attitude brought him to the therapist and makes him an ally of the therapist with whom he tries to master his irrational neurotic reactions And just because the therapist never abandons the realistic therapeutic attitude, the patient's neurotic behavior becomes pointless and one-sided and brings the irrationality of the neurotic patterns into sharp relief

" The essence of this principle [corrective emotional experience] is that the more precisely the therapist is able to revive the original emotional situation in the transference, and the more precisely he can provide by his own attitude towards the patient the necessary corrective experiences, the more profound and speedy will be the therapeutic result" (pp. 112-114)

5 *Personality theory based on the concept of stages of libidinal organization* (Menninger[27]). This part of psychoanalytic theory was discussed in Chapter 4 and needs no further elaboration at this point

Most of these concepts are well accepted in modern psychotherapy and well bolstered by experimental and clinical evidence. Thus the difference between analytic therapy and psychotherapy in general is very largely one of emphasis, with the analysts placing greater emphasis than the others on (1) the use of certain techniques such as free association and dream analysis, (2) the systematic use of interpretation to bring about insight and emotional re-education, (3) the handling of the transference relationship as the core of the psychotherapeutic process, (4) the use of various specific dynamic concepts relating to psychoanalytic personality theory, such as those concerned with the Oedipus complex and the several stages of libidinal organization.

Development of analytic therapy. Perhaps it would be helpful here to review briefly the various modifications which psychoanalytic therapy has undergone. Alexander and French[2] list five periods in the development of modern analytic therapy.

First period—*Cathartic hypnosis.* During the first stage of psychoanalytic development Freud used hypnosis as a means of helping the patient to recall his past experiences and discharge his repressed emotional feelings. While under hypnosis the patient was asked questions designed to uncover the origin of his symptoms and to release the repressed feelings. This emotional discharge was considered of great therapeutic value by Freud, particularly in the case of hysterical patients. However, he soon found that the simple discharge of repressed emotions did not cure the patient and that the procedure had to be continually repeated to obtain results.

Second period—*Waking suggestion.* Acting on the assumption that repressed emotional experiences uncovered under hypnosis are for some reason not assimilable by the conscious ego, Freud set out to find a procedure by which the patient could be induced to face these repressed emotional experiences. The first step he took in this direction was an experiment with "waking suggestion." Here Freud would place his hand on the patient's forehead and assure him that he (the patient) could recall the past. This method, however, did not enable the patient to recall those traumatic events which had presumably led to his neurotic reaction.

Third period—*Free association.* When he found that suggestion alone was not effective, Freud developed a new strategy—the method of free association. Here the patient was encouraged to tell whatever entered his mind without any attempt to direct or control his associations. Now, in a relaxed, permissive atmosphere, it was found that by this method deeply repressed, conflictful material could be uncovered. In the use of free association, dreams became an important source of unconscious material in terms of unrecognized desires, conflicts, and trauma. Thus the train of associations growing out of dreams, and eventually systematic "dream analysis," became an important part of Freud's psychotherapeutic approach. Free association was now used to uncover unconscious material in much the same way that hypnosis had formerly been used. By using free association over long periods of time the patient could discharge repressed feelings a little at a time in much the same way that he had done previously under hypnosis.

Fourth period—*Transference neurosis.* Despite the advantage of free association over hypnosis, Freud still encountered "resistance" on the part of the patient—the reluctance of the patient to recall the events of the past that had disturbed him or to accept the analyst's interpretations of his experiences and behavior. The discovery and use of transference represented an effective method for overcoming the patient's "resistance" to facing disturbing emotional experiences. "Transference" itself, as we have seen, refers to the emotional reaction of the patient to the analyst in identifying the analyst with his father or some other authority figure of his childhood, and experiencing in relation to the analyst the same conflicts and feelings which he experienced in the past toward the father or other important figure. The reliving of the patient's neurotic past in a sense re-creates his real-life neurosis, and itself tends to assume the intensity of a neurosis—a *transference neurosis.* In his description of this transference neurosis, Hendrick[18] states that the transference develops

> ". . . to a point where the transference emotions are more important to the patient than the permanent health he is seeking. This is the point where the major unresolved, unconscious problems of childhood begin to dominate. They are now reproduced in the transference with all their pent-up emotion. The patient is unconsciously striving for what he failed to gain or to

do without in actual childhood. Only those who have observed it will appreciate how fully much of the reaction to the analyst at this period is like a child's Petulance, irritability, defiance, even a childishness in tone of voice are frequent, even in people who are otherwise quite mature" (p 208)

Gradually the patient works through this stage, with its maturing and corrective emotional experiences which are made possible in large part, as we have seen, by the fact that the therapist's response is different from the early parental response The final steps in psychoanalysis, as in other types of therapy, involve the termination of the therapeutic relationship and the implementation of the patient's personality growth by appropriate positive action in real life

Fifth period—*Emotional re-education.* Up to stage four, psychoanalytic therapy was primarily concerned with bringing childhood memories to the surface, discharging the emotional tensions connected with them, and to some extent effecting a change in intellectual attitudes toward these experiences. With the utilization of transference, however, psychoanalytic therapy has become a methodical training of the ego The psychoanalytic attack is directed toward emotional re-education and the restructuralization of the personality toward internal and external harmony

From this point modern analytic psychotherapy has undergone various modifications which deviate somewhat from traditional psychoanalysis but which are aimed at changes in ego structure through emotional re-education Some analysts still adhere strictly to what is considered standard long-term Freudian psychoanalysis, involving the application of free association, dream interpretation, and transference neurosis to the uncovering and working through of the major emotional conflicts of the patient's childhood Other psychoanalysts, however, have worked out various modifications in technique designed to shorten the total time required and to orient their techniques to meet the needs of particular types of patients Thus analytically oriented psychotherapy has become available to a larger number of patients Whereas it was once primarily restricted to psychoneurotics, it can now be used in both individual and group form with psychotics as well.

The following material* is taken from an early analytic interview with a woman in her middle thirties who was suffering from an obsessive-compulsive neurosis (Patient and Analyst are designated by "P." and "A")

"P I was perfectly well and happy, Doctor, until three years ago when I had an attack of influenza During that illness, while I was feverish, I had several bad dreams It was a few months after this that I developed a number of nervous symptoms, which in the course of several months settled down to these absurd impulses and fears, which have remained with me ever since, and against which all my efforts to fight and kill have proved unavailing.

The first symptoms included extreme lassitude· I could hardly walk upstairs I used to get palpitations of the heart and dreadful headaches at the back of my head Insomnia followed then more terrifying dreams I would awake at night with a desire to scream I thought I was going mad I read something in a book about leprosy, and then I could not get that *word* out of my head

I had a terrifying dream

I was going to . Station in a taxi and passed a man with his hands out begging He was headless, and I knew he had leprosy

Another dream I had was that my employer was staring at me with a strange look in his eyes, and I felt he was going to harm me.

This dream also has had a lasting effect, because now if he comes behind me I get an awful frightened feeling. It is absurd, but I cannot get rid of it

Then there was a third dream:

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I dreamed he had his back to me, and he was bending over doing something, and I stabbed him in the back.

The sequel to this dream has been my most persistent symptom. I shortly developed a sort of desire or impulse to stab him in the back, and of course, an ever-present fear of doing so. I dare not even see a pair of scissors lying about at the office. It is most odd, as I am really *very* fond of this man.

I have always had such a clear and efficient mind that it seems to me a most brutal tragedy that I should be afflicted with these symptoms, 'leprosy' and wanting to kill. A doctor that I saw years ago put it down to sex repression, but that is not true. Besides fear of going mad, I have ideas of suicide.

Now I have been sent to you as a last resort, but, to be candid, I have no faith in this psychological treatment. I believe it is all nonsense but I have now had these symptoms for nearly three years, and something has got to be done about them.

A. Is there any satisfaction of your nature or impulses which you were enjoying three years ago, and which you have since been deprived of?

P. I don't think so. The only thing that happened three years ago was that I gave up my own flat and went to live with my father and stepmother.

That reminds me that at first it was my father that I 'wanted' to stab. But it soon became my employer. In phantasy I have pictured myself killing him, stabbing him in the back with the bread knife. He was bending over, and I actually visualized myself raising my arm, bending over him, and stabbing him! This picture keeps recurring. Occasionally it gives place to the thought of suicide. Then I would picture myself looking in the glass and cutting my throat.

A. Have you any grievance against your father or your employer?

P. As a child I idolized my father until I came to realize that he made mother very unhappy. I thought indirectly, he might have been the cause of her early death. Then I hated him. But now the impulses are not about him, but about my employer, who has always been very good to me. I have been perfectly happy with this employer for the past fourteen years until this trouble started three years ago. We have always been so much in tune with each other.

He runs his own business, and says that its success is entirely due to me, my efficiency and the help I have been to him. Of course, I have helped him with every ounce of energy and ability I possess, for I have loved him ever since I was twenty-two.

But that can't have anything to do with my illness, and I would rather not talk about it, if you don't mind."

(Here the therapist again explained that free association of thought was her part of the work and that nothing that crossed her mind should be withheld from him—that complete frankness was essential to the success of the treatment.)

"P. Oh, well, if you must have it, I will tell you. I didn't break his marriage up. It was already cold and dead before I met him. I was quite willing for his wife to divorce him, but she would not. She said 'If you want to become his mistress, you stew *in it*.' This was years ago, when I was only twenty-two. I felt he was the only man I could love in my life. We have been very happy all these years, until the onset of this wretched illness.

A. Is there any satisfaction that you were getting before three years ago, which has since been lost to you?

P. Well, of course, as I have told you, I had my own flat up to that time, and he could visit me freely and stay as long as he pleased. Since I have gone to live with my father and stepmother we naturally only meet at business and there is not much opportunity for love-making, nor is it so satisfactory. But I don't see what that has got to do with my symptoms, except that, as you have pointed out, there seems to be a time-coincidence. Now I am afraid of the future, afraid of losing my mind. It has been a good intelligent mind up to now. I am in-

dignant that these impulses and phobias and this horrible word should keep intruding

A. Perhaps you have always opposed your impulses and feelings very strongly

P. Well, I know I have always had strong feelings—strong feelings of repugnance towards nasty things, and I know I am capable of strong feelings of love. Love means sacrifice, caring for people I have felt of this man on some occasions that I love him so much I could eat him.

A And now perhaps you are saying 'I love him so much I could stab him'

P Oh, no! That is nonsense!

A. Unless it is that you are saying: 'I hate him so much I could stab him'

P. I know I have had very strong hatreds for certain things, but I can't believe that I have ever hated him

I dislike animals. I can't bear them to touch me I can't bear hair or furs I had the idea once that leprosy was carried by furs, and I don't believe I have ever got over that idea. Certainly, I have never been able to wear furs I can't handle them or touch them

A. What else do you dislike handling?

P. Soil, worms, spiders I have always been fussy about touching things that were not quite clean. The idea gives me a nasty feeling, a cold horror, and that word 'leprosy' comes to my mind I could never stroke a kitten, and if an animal brushes against me I go hot and cold with fear, like I go hot and cold with fear at those thoughts I have had. Can it be connected with the fact that when I was very much younger I disliked anybody touching me, and I could never stand sentimental displays?

I used to get a similar feeling of fear, a sort of cold horror, with one or two men I met in my youth up to the age of twenty-two. I think of a beastly type of man I think of men who take advantage of you when they are dancing with you If either of these men even touched my arm when he was dancing with me I would get a feeling of cold horror, like I get at the thought of 'leprosy.' One of these men also had a nasty habit of holding me too close, and he stroked my arm in a horribly suggestive way

A What would it suggest?

P Oh, something nasty—intercourse, I suppose

A What does the curved back that you want to stab suggest to you?

P A curved knife the long curved packing needle that I once thought of stabbing my lover with Oh, doctor, you make me think of most horrible things I can't tell you what I thought of them

When I was about nineteen, I went to see a film about venereal disease I was white as a ghost after it I felt everything was pretty dreadful Dirt and sin and sex are all the same—like venereal disease, and now I come to think of it that is the feeling I get when I think of 'leprosy.'

I was horrified at all such things, and I was very much 'don't-touch-me' at that time And yet it was just about then that I was so much in love with this man that I gave way to him My father had wanted me to marry somebody he thought suitable, but the thought nearly drove me mad I couldn't have borne him—even to touch my elbow, and yet I willingly gave way to this man.

He was already married. I don't think I really wanted intercourse, even with him. I don't think I should ever have wanted sexual intercourse on my own account But I loved him so much I couldn't have refused him anything I couldn't love him like that mentally without wanting to be kissed and fondled I did like it when he first kissed me. But I didn't like the other part at first I didn't see why he wanted to bring sex into it

Although I learnt sometimes to appreciate that too, even now more frequently than not my feelings are against it But, of course, I still could not refuse him anything It is often against my feelings, and yet it is my nature never to refuse him.

A What association of thought do you get to these feelings?

P The memory of those horrid men I have

spoken about, who touched my arm suggestively. I remember now how I was forced at an early age to kiss my father against my inclination. I hated it

A So now at last we have the hate we were looking for What association do you get to this?

P The cold horror The feeling I get when I think of 'leprosy' That headless man in the dream Some atrocity being committed Dirtiness, sexual intercourse The impulse to stab And the fear I have of it

A. So your resistance to being touched, which was so evident in the dancing experiences before you were twenty-two, has not disappeared It seems to be there still, in spite of your love of this man While, on account of your love, you allow him to do what he pleases to you, you at the same time frequently retain your old revulsion, the feeling of cold horror, and the idea of 'leprosy,' which, it seems, is another name for venereal disease Although you cooperate with him in doing violence to your resistance, it seems that your resistance returns with a vengeance after the act. And then you wish to stab him *or it* in the back" (Berg[3], pp 47-51)

In the course of her analysis, this patient was able by means of free association, aided by the questions and interpretations of the analyst, to gain insight into her repressed feelings and conflicts, to modify certain emotional attitudes, and to gain release from her disabling symptoms.

PSYCHOBIOLOGY

Among the major nonanalytic systematic approaches is psychobiology, as developed by Adolf Meyer and his followers As we have noted in our historical introduction, this is a holistic approach to understanding the patient's disorder, involving an analysis of the factors—biological, psychological, and sociological—concerned with the origin of the patient's illness Careful attention is paid here to the patient's complaint, not just as an intellectualized verbal statement, but as a sign or clue leading to the underlying behavioral and motivational abnormalities As the total dynamic picture emerges, the patient's problem is formulated in the simplest possible terms, and the treatment program is worked out. The entire effort is directed toward a synthesis of the total personality so that the patient can achieve maximum feelings of security and adequacy. This permits the flexible use of every available facility—medical, psychological, sociological—which may have some value in restoring the patient to health To better achieve this goal of synthesis, each session is usually followed by a summary in which the gains made are reviewed for the patient to help him consolidate them into his personality structure

In psychobiological therapy, both the patient and the therapist take an active role Responsibility is placed upon the patient for sincerely trying to cooperate and bring up relevant material in each session, so that therapy time will be properly utilized. Responsibility is placed upon the therapist for directing and actively assisting the patient in achieving synthesis Here the therapist may make use of interpretations, questions, role playing, and any and all other procedures that seem to fit the needs of the immediate therapy situation In view of the patient-therapist sharing of responsibility and the flexibility of this approach, it has often been said to rely heavily upon the intuitive "common sense" of both the patient and the therapist in selecting and pursuing the most effective treatment procedures In his summary of the distinguishing features of psychobiological psychotherapy, Muncie[30] states

"Psychobiologic psychiatry keeps close to the complaint problem, attempts to formulate the problem in non-technical language, varies the procedures to include special methods and concepts where these seem indicated and helpful, and encourages a reasonable sense of responsibility in the patient for his actions" (p 25)

In actual practice, modern psychoanalytical and psychobiological therapies are hard to distinguish Both emphasize an adequate diagnostic evaluation, the careful planning of psychotherapy in terms of appropriate aims and techniques needed by the individual patient, and the flexible use of any or all therapeutic techniques and adjuncts as the needs of the moment may indicate. Perhaps their greatest point of difference lies in the psychoanalytic emphasis upon the analysis of mental processes in order to achieve an effective synthesis, whereas psychobiological therapy tends to minimize the analysis and to work actively and directly toward increased personality integration or synthesis. In this connection Diethelm[8] states·

Due to a certain synthesizing tendency of the human personality, many patients spontaneously make constructive use of the material about themselves which is brought to light in the therapy sessions. This is to be expected in the average well-organized personality whose problems do not seem insurmountable to him In more disturbed persons, however, where the illness is not conducive to the ready functioning of associative healing tendencies, analysis may easily leave the patient with much material which he cannot use constructively For this reason it is essential that the therapist pay constant attention to synthesis (Adapted from p 113)

The following case shows the psychobiological rationale and approach, though no case could actually be called "typical" of an approach so subject to variation with individual needs .

"An 18-year-old, unmarried girl developed attacks which impressed the physicians as anxiety attacks She improved considerably while treated by a neurologist . . After treatment, she was well for three weeks, but had another attack when invited to the home of a family where she felt socially somewhat ill at ease Another attack occurred after a large coming-out party. In addition to these 'anxiety attacks,' she developed fear of committing suicide, especially when seeing a pair of scissors, and fear that her father might commit suicide. She developed many other fears, such as fear of driving her car, because she might get mixed up in some kind of accident, fear of passing churchyards, and fear of insanity Superstitious tendencies increased considerably All her symptoms were worse during menses when 'everything seemed futile' The problem of death assumed large proportions She was overwhelmed by the thought of futility of life and of becoming nothing through death

"At the beginning of March . . she came for treatment which lasted four months, requiring three hours a week The patient had great difficulty in discussing her personality as far as imagination was concerned, but gave with ease a fairly good description of the main features of her personality During the questioning she always watched the physician carefully for the impression she made on him She described herself quite correctly as a cheerful girl who was inclined to worry over details because of great conscientiousness and a perfectionistic attitude She was sociable, but shy and self-conscious and felt socially inadequate She felt this especially in her own crowd and with people who were attractive to her and she got along much better with older people, who enjoyed her intelligent conversation and early maturity. She had always had great difficulty in adjusting to failure, and a tendency to worry about remarks she made in social life, wondering whether they might have been considered tactless She was sensitive to criticism, sympathetic toward others, but with a marked tendency to self-pity, easily confiding and frequently regretting it afterwards In recent years there had been an increasing fear of failure. Physically, she was quite attractive

"Many factors in her environment which were elicited in the first few discussions were not quite satisfactory Her mother was a high-strung, excitable person who lacked control of her emotions, constantly anticipated difficulties and was easily worried over finances, which she and her

husband had discussed frequently in the last few years Her father was a cheerful and sociable man who, due to financial strain, had been increasingly irritable in the last six months The patient was the oldest of four children One sister was one year her junior, an attractive and socially successful girl. Another sister was 14 and a brother 12, both in the puberty spite stage.

"The patient had always been in good health Menses had been regular until the previous year and without much pain, but she and her mother paid a great deal of attention to it and her physician advised her to take paregoric whenever there were pains.

"Because of the difficulty in discussion, a Jung association test was given This revealed marked reactions to words referring to death and cessation of life, security, sin, nude, lie, pride and anger, sister, narrow, town, ridicule and pity A brief discussion of these points did not lead far and free associations were therefore started. The Jung association test and dreams, as well as problems which otherwise seemed of importance, were used as a guide for the distributive analysis With the help of free association treatment, the patient learned to offer her material without constant self criticism Before, she had always tried to formulate her answer and smooth over the most important factors.

"The facts which came to the foreground when discussing her fear of death and her protection by superstitious activities were her inability to accept the loss of individuality with death and her being bewildered by the concept of eternity. This led to a discussion of sin and the question of punishment hereafter for immorality. Under immorality she mentioned sex, stealing and drinking. Usually the patients mention the symptoms in the order of the importance or the reverse It became obvious later that the group which she mentioned centered around sex For two years she had suffered from 'guilt feelings' because of sexual thoughts which had gradually occupied her imagination completely. She began to wonder in social life whether girls were pure and whether they had sexual relations and enjoyed them. Walking on the street and driving her car, she began to look at strangers with similar thoughts in mind She began to mention that death was especially terrible for young people and even more so for unmarried people. This was explained by the fact that old people had obtained from life what they could expect; young people had not, and unmarried people had not even had a chance to have sexual relations. There was a constant wondering whether life hereafter allowed sexual relations. Dreams of nude men, especially when taking a course in art, had upset her greatly In connection with that, she mentioned a classmate who had been considered slightly homosexual, and that the girl had held her hands

"The discussions of her heterosexual interests and desires occupied about a month, but other problems were naturally discussed in connection with them Frequently, when the patient was unable to proceed along a given line, I changed to a different topic which seemed somehow related to the discussion and returned to the first topic after some progress along other lines had been made. This is one of the outstanding features of distributive analysis Many times problems were left more or less unsettled at the end of an hour, and they were often formulated in the form of a question before the patient left This, although the patient tried not to think about treatment between consultation hours, stirred up some of the dynamic factors and the next hour the answer to the question was often easily obtained Related topics were her sister's easy social attitude and the fear that she might develop into a 'wild girl' as some girls of her social set were supposed to be The patient stressed her fear of drinking because it would diminish her resistance to her sexual desires The problem of stealing, which she had mentioned previously in connection with immorality (sex, stealing, drinking), was more of general importance and was apparently used in her formulation of her complaints primarily as a cover to conceal the importance of the other two complaints

"The patient (middle of April) was asked to give associations to 'holding hands' which, as she

had revealed some time previously, had to her a marked sexual meaning The touch of hands produced a local sexual sensation At an age of about 13, when holding hands with a boy, she had felt the first sexual stimulation, which had upset her greatly and induced a fear of being pregnant She often since then has thought about sexual assault The fear of this, which she gradually began to recognize as a wish, caused her fear of the dark which had been present since the onset of puberty.

"Discussing the drinking of her parents (middle of April) led to an understanding that she was afraid of sexual misdemeanors by her father when under the influence of alcohol. She had noticed that he occasionally held some attractive woman's hand on such occasions, which to her meant that he would obtain the same sexual pleasure from it as she did herself. She also was greatly worried over the possibility of social misdemeanors in such circumstances and felt that the ideal which her father was to her was lowered by alcohol Her mother's drinking played a less important role but there were some fears of sexual misdemeanor, especially with the family physician, who apparently paid a great deal of attention to her mother when he called on the patient. This physician was physically, and in some of his behavior, quite similar to her father, but the patient did not make such a connection until much later in the treatment. Cardiac examination, which he frequently repeated, stirred her up.

"Soon after these discussions, that is, after about seven weeks of treatment, the problem of her relationship to her father and the question whether the fear of his death might be an expression of a wish was put for consideration. Similar suggestions had been offered by the neurologist and had been repulsed, but now the patient was interested in the problem, having gained much understanding of the possibility of dynamic factors working in herself. Within an hour, she obtained a good understanding of this phobia with regard to death, which expressed her wish that death might prevent her father from social ruin, alcohol and promiscuity. It also expressed, as was seen a few days later, a marked resentment to the present precarious financial situation, during which she was forbidden to buy attractive dresses, etc., while her parents spent a considerable amount (to her, while in reality it was apparently a negligible amount) of money on drinks. She discussed her resentment to her mother because of her interference and became aware of a certain jealousy with regard to her father. This point was not pushed much further, as the patient showed great difficulty in producing associations There seemed to me other urgent topics which needed discussion and that we might return to the father-daughter relationship later.

"A brief therapeutic rest was given for two weeks in May by turning to discussion of less stirring problems, such as her social adjustment and her need for self-assertion In boarding school, she had been quite disliked because of it and because of her highly ethical attitude During the last two years her need for 'superiority' had increased with increasing doubt of her own value. To appear above prejudices, she had suggested that a girl who had been considered a 'fairy' by others share her room When this was first mentioned, the patient did not pursue this further. About three weeks later (beginning of June) she returned to it, stating that she had felt quite attracted to the girl and that when holding her hand had received a similar thrill as when holding hands with boys One night, she had crawled into the girl's bed during a thunderstorm, but she later wondered whether it had not been due more to sexual attraction than to fear and whether she might not be homosexual. Discussion of this problem led to an understanding of the possibility of homosexual attraction, especially in adolescence, and its distinction from homosexuality as a life problem. Until the end of the treatment, the patient occasionally came back to this problem and one was able to see an increasing ease in the discussion of it She also realized that besides physical attraction, her desire for affection and sympathy caused her to crave such physical contact She never received it at home except from her father.

"Her 'great desire to be infinitely better than anybody else' caused her to be over nice to people, for which she had often been criticized She was very sympathetic and kindhearted. In marked contrast to this, was her belief in and urgent defense of capital punishment. This was due to a cruel streak in her, which she had always hidden successfully but which was fostered in dramatic monologues Recently her fears had centered about the possibility of her father's suicide, when she had noticed a pistol in his car. She tried to justify suicide on the basis of depression or financial difficulties or in the case of extreme immorality on the part of a girl This meant to her loss of virginity.

"The problem of virginity had preoccupied her greatly and she had puzzled over the question of the Immaculate Conception (the patient was Episcopalian). In the last year, her sexual preoccupations had increased so that she was unable to keep them away for any length of time Her whole thinking was dominated by it Observations of her childhood, which she had long forgotten, came back with great force, such as male genitalia which she had noticed in her brother when he was an infant seven years ago (at 11), and she began to wonder greatly about the sexual relations of her parents She had marked guilt reaction to such thoughts As, with increasing age, admiration of her father increased, she became more aware of the physical factors. The analysis of her fiancé showed that he was to quite some extent like her father in his physical build and in his interest in books, politics and his whole ethical attitude She did not like his not being tall like her father With the progressing treatment and the increasing emancipation from her father, she began to love her fiancé as an individual and to like the features in which he was different from her father as well as the similarities She began to realize that her antagonism to her mother was to some extent based on jealousy and not only due to her mother's self-assertiveness (This material was obtained in June).

"Her emancipation from simple childhood beliefs, the development of her own life philosophy and a religion which fitted her own personality developed during a discussion of her grandmother, who was narrowly religious and played a dominant role in the girl's life Reward and punishment were the basis of the patient's religion Her interest in capital punishment was not only based on a cruel streak but also on a desire for retaliation and a feeling that she would deserve death for having had those sexual wishes and death wishes for her parents This horrified her because death would include eternal punishment Together with this, she dwelt on thoughts of being a martyr The problem of reincarnation puzzled her greatly. She pictured herself being re-born as a 'wild-girl' (predestination would then excuse immorality) or a man (men have the right to be promiscuous)

"Closer analysis of her interest in her own hands and the use of perfume revealed a great interest in her own body She wanted to be feminine in order to be admired The leading image was a paternal aunt who was quite beautiful, who attracted a great deal of attention and was said to be inclined to be flirtatious The influence of this aunt dated back to an age of about seven, but had increased during puberty. Her envy of her sister was based on the same exaggerated interest in her body On the other hand, there were also desires to be proud of masculine features in make-up and behavior because it would indicate independence and healthy self-assertion The same exaggerated attitude which she had to her body also played a role in her own ethical evaluation, leading to wishes of being a leader, fully appreciated for her intellect and especially for her ethical purity and to many dramatizations along this line

"Further analysis of fear and desire to be masculine (in July), showed clearly the multitude of factors involved—fear and desire to be homosexual, desire for appearing independent, especially in sexual and social life. The patient obtained an increasing understanding of her personality and was able to see how some of the features in her make-up, which had developed in definite directions during life, could be modified She saw, for instance, that her tendency to

be too confiding in others was based on her constant need for dramatization, her tendency to be snobbish and patronizing was an increasing need for being appreciated On the other hand, lacking confidence in herself, she constantly had to assure people that everything and everybody was wonderful, although she had a great desire to be frank and tactless, telling them just how she felt about it Conscientiousness led to overconscientiousness and anticipation of difficulties due to lack of genuine self-confidence Her desire to please others led frequently to impulsive promises which she had difficulty in keeping Although previously tidy in her thinking and actions, she became untidy because she wanted to do too many things, never finishing a task completely and putting it off She recognized that she had marked sympathy for suffering of others and wanted to help, but that much of her present desire to be generous was based on a desire for superiority and need for being admired Her attitude to her future had been based on her great desire to be a success as a personality as a whole, but especially socially and culturally She had desired to go to college but this had been refused by her mother who did not believe in college education for girls She thought constantly about becoming an ideal wife and bringing up a family Her sexual preoccupations were less of a definite topical nature than of this more general type The patient began to integrate her various strivings which she had previously developed independently without attempting to adjust them to each other At the end of the treatment she was aware of the need for integration of her intellectual capacities and needs with her spiritual and material, sexual and bodily interests She understood the danger of developing isolated tendencies to perfection Her attitude to her own body, to appearances and to the social group changed greatly and she was able to feel more at ease at social gatherings. She began to learn not to indulge unduly in imaginations, guarding especially against sexual preoccupations and self-dramatizations. Her menses, which had been irregular for the last year, became regular and were not painful any longer She had no need for superstitions and had lost her fears completely In the last few hours, we investigated a few of the symptoms which had not been discussed before, such as her fear of a pin of scissors, which was based on her desire to stab her father when he was imbibing alcoholic beverages Her fear of heights was based on a fear of being unable to control suicidal wishes These wishes were not only the expression of feeling desperate and nearly panicky about her fears, but also due to a tremendous death curiosity The factors which had been indicated by the Jung association test had all been cleared up . ." (Diethelm[8], pp 127-133)

The preceding case history shows the gradual working through of dependency-independency, sexual, and various other conflicts and problems typical of the transition period from adolescence to adult status. In the actual therapy proper, the therapist relied heavily upon questions, dream analysis, free association, and interpretations for directing the therapy into profitable channels. At no time was an attempt made to break through "resistances" into the unconscious or deeper layers of the personality Rather treatment was directed continually toward synthesis, thus strengthening the patient's personality and preparing her for subsequent discussions which would have previously been impossible.

SOCIOLOGICAL THERAPY

Sociological therapy refers primarily to the modification of the environment in order to provide a life situation in which the patient has a reasonable chance of making a successful adjustment In the treatment of children with behavior problems, this often involves the treatment of the parents rather than the child; in some cases it means a foster-home placement for the children In therapy with adults, it may involve assistance in finding a

job, in establishing a church affiliation, in modifying the attitudes and behavior of relatives with whom the patient may live, in asking a boarder to leave, in helping the patient to find better housing conditions, and so on Thus sociological therapy may take many forms. It is carried out primarily by the social worker, often with the aid of various social-welfare agencies With periodic visits, and assistance and support by psychiatric social workers, many patients are able to adjust satisfactorily outside the confines of institutions where they would otherwise have to be hospitalized Such long-range contacts have been found particularly effective in maintaining the recovery of patients who have been discharged from hospitals When stresses begin to build up and become too threatening, they know they can turn to the social worker for assistance to tide them over the crisis period Obviously, such social workers are undertaking a most difficult field of psychotherapy and must be well trained both in the dynamics of personality adjustment and in psychotherapy

The following case indicates the crucially important role which the social worker may play in the total therapeutic plan.

A 48-year-old mother would travel some 30 miles by bus and streetcar after work on Friday evening to meet her son at the hospital The son, a 22-year-old patient diagnosed as a paranoid schizophrenic, would then accompany his mother home for the weekend and return to the hospital on Monday morning * He was perfectly capable of going home by himself, but his mother insisted that he remain at the hospital until she could get there, which was usually after 9 o'clock in the evening By the time they got home, it was well after 12 00 and the mother would be worn out She would then be sick the next day and continually remind her son how she had gotten sick looking after him, insisting that the least he could do would be to remain with her during his weekend visit In this way he was unable to go out on dates or otherwise do anything that he wanted to do and on his return to the hospital on Monday morning he was hostile and severely disturbed Thus his weekends at home were undoing practically all that had been accomplished with him in psychotherapy the preceding week It was not until a psychiatric social worker counseled the mother and managed over a period of time to modify her attitudes and behavior that the patient began to show consistent improvement

In attempting to provide the reader with an overall view of modern therapy, it should be pointed out that the experimental evaluation of techniques in terms of range of effectiveness, most appropriate uses, and actual results is currently under way With increasing knowledge, many of the controversial issues in the field will be resolved. In the meantime it seems desirable to emphasize an eclectic and skeptical orientation, permitting the final evaluations to be determined on the basis of experimental evidence.

MENTAL HOSPITAL AND CLINIC

Perhaps a convenient way to summarize our discussion of therapy is to outline briefly what happens to a patient in a mental hospital or clinic As we shall see in Chapter 15, there is a conspicuous lack of uniformity in the standards and conditions in our mental hospitals Some are modern in equipment and up-to-date in approach and therapy Others do little more than provide custodial care.

Often the average individual who has never been in a mental hospital has a distorted idea of what takes place behind its doors He has been influenced by popular accounts which exaggerate the symptoms of the patients and leave the impression that most mental patients

* Not uncommon in milder cases, regardless of classification, either in terms of a weekend pass or a "TV" (trial visit)

are disoriented, raving, and relatively hopeless cases, he visualizes bars, padded cells, chains Actually, more patients give an impression of depressed inactivity than of violence. It is more of a problem to keep them active than to restrain them Although some of the patients may be severely disturbed, the majority appear so like ordinary people that it is often difficult for a visitor to be sure whether he is talking to a patient, a ward attendant, a nurse, a psychologist, or a psychiatrist Despite their difficulties, most mental patients are clearly aware of who they are and where they are, and how they are being treated It is erroneous to think of them as unaware of their surroundings, or as animals or idiots The borderline between "normality" and "abnormality" is shadowy, and even those legally classified as "abnormal" retain many of the capacities of the "normal." The many people who have friends, relatives, or acquaintances in mental hospitals realize that these patients, except in a few extreme cases, do not go so far "out of their minds" that they are unrecognizable as their former selves

The sequence of events in the hospitalization of a mental patient comprises several steps.

1. *Admission* Although some patients talk about being "kidnaped" or "railroaded" into mental hospitals, it is actually more difficult to obtain admission to a good mental hospital than it is to get out Private clinics of necessity have to charge rather high fees and thus are not available to many persons, and public hospitals are so overcrowded that they are eager to discharge patients as rapidly as possible

To commit a patient to a mental hospital against his will requires the certification of two physicians to the effect that he is dangerous to himself or others Since most mentally ill persons are not dangerous except for the fact that their lack of judgment and inability to care for themselves may have undesirable consequences, the term "dangerous" often has to be stretched to admit persons who need psychiatric aid and would themselves suffer if left in the community. After the individual has become a patient, the doctors have the right to discharge him at any time they may decide his condition warrants it.

Another method of admission is for the patient to ask voluntarily for hospitalization. If he wishes, he can make this request with the understanding that he may leave the hospital if he decides that he does not want to remain. Sometimes as a result of the pleas of relatives or a change of mind on the part of the voluntarily hospitalized patient, he is discharged even though the doctors feel that he is not yet ready. This type of discharge is referred to as "AMA"—(against medical advice).

On admission to a modern mental hospital the patient is met by nurses and a doctor He is given a rapid examination that serves to reveal his general physical and mental condition. He is weighed, his pulse and temperature taken, and his personal belongings and clothing marked for his protection, he often receives a bath and is tidied up. Pertinent sociological data from relatives accompanying the patient may be obtained at this time. The patient is then assigned to a ward pending a complete diagnostic evaluation.

2. *Diagnostic evaluation*. Ideally, as soon as possible after admission the patient is given a complete medical and psychological examination. In hospitals where facilities are adequate this usually requires a period of several days by the time blood tests, basal metabolism, roentgenograms, heart examinations, and the various psychological examinations are completed. Then, as we have previously noted, this material, together with the sociological evaluation, is integrated during the staff conference, and coordinated plans for therapy are formulated.

3. *Therapy* Therapy will depend both on the facilities and personnel available and on a patient's individual needs Therapy may include a combination of any of the various medical, psychological, and sociological tech-

niques which we have discussed. Although patients who are severely disturbed may be confined to a particular ward, most patients are given ground privileges, and, as their condition warrants, they are given permission to return home over weekends or for more extended periods of time Although psychiatrists prefer that the patients remain until recovery is well under way, most patients are of necessity discharged as soon as they have progressed to the point where they no longer require hospital supervision.

REFERENCES

The reference list includes not only the sources from which the author has drawn material, but acknowledgments of the permissions granted by authors and publishers to quote directly from their works

1. Alexander, Franz "Individual Psychotherapy." *Psychosomatic Medicine,* VIII(1946), 110-115
2. Alexander, Franz and French, Thomas M *Psychoanalytic Theory.* Copyright 1946, by The Ronald Press Company
3. Berg, Charles *The Case Book of a Medical Psychologist* New York. Norton, 1948, London· George Allen & Unwin, Ltd
4. Bond, E D and Rivers, T D "Insulin Shock Therapy after Seven Years" *American Journal of Psychiatry,* CI(1944), 62
5. Brenman, M and Gill, M *Hypnotherapy* New York· International Universities Press, 1947
6. Cerletti, U and Bini, L "L'Elettroshock" *Archivo Generale di Neurologia, Psichiatria e Psicoanalisi,* XIX(1938), 266
7. Deutsch, Felix. *Applied Psychoanalysis* New York· Grune and Stratton, 1949
8. Diethelm, Oskar *Treatment in Psychiatry* Copyright 1936 by the Macmillan Company and used with their permission
9. Erickson, Milton H "Experimental Demonstrations of the Psychopathology of Everyday Life" *Psychoanalytic Quarterly,* VIII(1939), 338-353
10. Freeman, Walter "Transorbital Lobotomy" *American Journal of Psychiatry,* CV(1949), 734-740.
11. Freeman, Walter and Watts, James W *Psychosurgery.* Springfield, Ill.: C C Thomas, 1942
12. Freeman, Walter and Watts, James W. "Psychosurgery An Evaluation of 200 Cases Over Seven Years" *Journal of Mental Science,* CCCLXXIX(1944), 532-537
13. Frostig, J P ; Harreveld, A Van, Reznik, S., Tyler, D. B , and Wiersma, C A G "Electronarcosis in Animals and in Men" *Archives of Neurology and Psychiatry,* LI(1944), 232-242
14. Greenblatt, Milton and Myerson, Paul G "Medical Progress, Psychosurgery" *New England Journal of Medicine,* CCXL(1949), 1006-1017
15. Grinker, Roy and Spiegel, John P. *War Neuroses* Philadelphia Blakiston, 1945
16. Group for the Advancement of Psychiatry (Dr William Menninger, Chairman) *Research in Prefrontal Lobotomy,* Report No 6, June 1948, 1-9
17. Haber, Sidney, Paley, Aaron; and Bolckm, Arnold S "Treatment of Problem Drinkers at Winter Veterans Administration Hospital" *Bulletin of the Menninger Clinic,* XIII(1949), 24-30
18. Hendrick, I *Facts and Theories of Psychoanalysis* New York Alfred A. Knopf
19. Horsley, J S *Narco-Analysis* London Humphrey Milford, 1943
20. Kalinowsky, L B and Hoch, P H *Shock Treatments and Other Somatic Procedures in Psychiatry* New York Grune and Stratton, 1946
21. Lecron, Leslie M and Bordeaux, Jean. *Hypnotism Today* New York Grune and Stratton, 1947
22. Liebman, Joshua Loth *Peace of Mind* New York Simon and Schuster, 1946.
23. Malzberg, Benjamin "The Outcome of Electric Shock Therapy in the New York Civil State Hospitals" *Psychiatric Quarterly,* XVII(1943), 154
24. Marmor, Judd "Psychoanalysis" In *Philosophy for the Future* (Sellars, R, McGill, V J, and Farber, Marvin, ed) New York Macmillan, 1949
25. Masserman, Jules H *Behavior and Neuroses An Experimental Psychoanalytic Approach to Psychobiologic Principles* Chicago University of Chicago Press, 1948
26. Meduna, L Von "General Discussion of the Cardiazol Therapy" *American Journal of Psychiatry,* XCVI(1938), 40
27. Menninger, W C *Psychiatry* New York Cornell University Press, 1948
28. Mitchell, S D and Zanker, A "The Use of

Music in Group Therapy" *Journal of Mental Science,* XCIV(1948), 737-738

29 Moreno, J L *Psychodrama* (Vol I) New York. Beacon, 1946

30 Muncie, Wendell "Failure in Treatment by the Psychobiologic Method" In *Failures in Psychiatric Treatment* (Paul H Hoch, ed) New York Grune and Stratton, 1948

31 Murphy, William F and Weinrub, Joseph "Problems in Teaching Short Term Psychotherapy" *Diseases of the Nervous System,* IX(1948), 101-104. Reprinted by permission of Physicians Postgraduate Press

32 Paster, S and Holtzman, S "Experiences with Insulin and Electroshock Treatment in an Army Hospital" *Journal of Nervous and Mental Disease,* CV(1947), 382-396

33. Paster, S and Holtzman, S "A Study of 1000 Psychotic Veterans Treated with Insulin and Electric Shock Therapy" *Annual Report,* 1947 VAMTG, Kennedy Hospital, Memphis, Tennessee

34 Robinson, Mary F, Freeman, Walter, and Watts, James W "Personality Changes after Psychosurgery" *Digest of Neurology and Psychiatry* Hartford, Connecticut The Institute of Living, Series XVII(1949), 558

35 Rogers, C R *Counseling and Psychotherapy* New York Houghton Mifflin, 1942

36 Rogers, C R and Wallen, J L *Counseling with Returned Servicemen.* New York McGraw-Hill, 1946

37 Sakel, M "A New Treatment of Schizophrenia" *American Journal of Psychiatry,* XCIII(1937), 829.

38 Slavson, S R "Differential Dynamics of Activity and Interview Group Therapy" *American Journal of Orthopsychiatry,* XVII(1947), 293-302

39 Snyder, W U "The Present Status of Psychotherapeutic Counseling" *Psychological Bulletin,* XLIV(1947), 297-386

40 Stainbrook, Edward "Shock Therapy Psychologic Theory and Research." *Psychological Bulletin,* XCIII(1946), 21-60

41 Strom-Olsen, R, Last, S L., Brody, M B, and Knight, G C "Results of Prefrontal Leucotomy in 30 Cases of Mental Disorder" *Journal of Mental Science,* LXXXIX(1943), 165.

42 Tomlinson, Paul J "Subcoma Insulin Therapy· An Analysis of 300 Cases" *Psychiatric Quarterly,* XXII(1948), 609-620

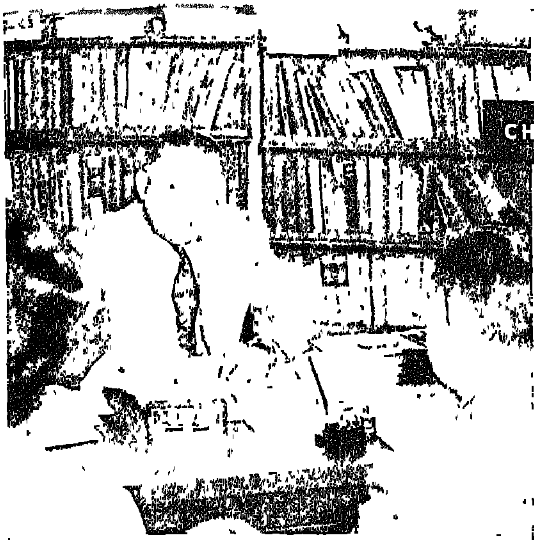
43 Viets, Henry R Editorial in *The New England Journal of Medicine,* December 22, 1949

44 White, Robert W *The Abnormal Personality* Copyright 1948, by The Ronald Press Company

45 Wolberg, Lewis R *Hypnoanalysis* New York Grune and Stratton, 1945

46. Yacorzynski, Georg K "Recent Advances in the Treatment of Mental Diseases" In *An Introduction to Clinical Psychology* (L A Pennington and Irwin A Berg, ed). New York Ronald Press, 1948

47 Ziegler, L H "Bilateral Prefrontal Lobotomy" *American Journal of Psychiatry,* C(1943), 178



Marriage counseling clinics, like the one directed by Dr Clifford Adams (above) at Pennsylvania State College, foster mental health in married life

CHAPTER FOURTEEN

THE PREVENTION OF ABNORMAL BEHAVIOR

Aims and Principles in Prevention • Organized Efforts for Mental Health in the United States • International Measures for Mental Health

As modern psychiatry has become an established and sophisticated clinical science, it has, like medical science, become increasingly concerned with the prevention as well as with diagnosis, understanding, and treatment. Just as medical science has developed vaccines and antitoxins to prevent smallpox and diphtheria, so modern psychiatry has developed certain principles to insure mental health

What we have said of the causation of abnormal behavior has, of course, direct implications for its prevention. Conditions which are known to have a part in psychopathology must be alleviated We know, for example, that providing playgrounds and replacing slum housing by modern housing projects are effective in the reduction of juvenile delinquency and crime Unfortunately, we lack sufficient knowledge concerning the etiology of the functional psychoses and certain other mental disorders to be equally positive in our approach to their prevention.

But in any case, prevention will necessitate more than the mere absence of unfavorable conditions It will mean the establishment of actively favorable, health-inducing conditions —biological, psychological, and sociological

Our first concern, then, will be to try to delineate the aims and principles which must underlie and guide preventive measures Then we shall review some of the activities that are actually under way in this country and abroad in an attempt to carry out these principles

AIMS AND PRINCIPLES IN PREVENTION

Precisely what kind of preventive measures might be expected to be directly conducive to mental health, in the light of what we now know of personality and stress and the individual's efforts to solve internal and external problems? We will find our most important clue in the concepts developed in Chapter 3, where we saw that behavior could be viewed as a matter of need-satisfaction sequences, with our many and varied psychobiological needs

patterned to serve homeostasis, ego integrity, and self-actualization Assuring the satisfaction of our psychobiological needs will mean establishing a favorable climate for certain basic types of adjustment to take place—physiological, occupational, social, philosophical, and so on. Satisfactory adjustment in these and other essential areas will insure mental health.

Although there is still considerable controversy over the most effective means of implementing these principles, and even to some extent over which types of adjustment are more basically important and necessary to us, we are in a position to outline the many types of adjustments that contribute to mental health, and the kinds of measures that can be taken to foster them and hence prevent abnormal behavior.

BIOLOGICAL PREVENTIVE MEASURES

The biological preventive measures proposed have involved two rather different approaches On the one hand, emphasis has been placed on the physical health of the individual, on the other, attempts have been made to manipulate heredity and to insure an adequate prenatal environment so as to get a healthier breed to start with.

General health measures. Clearly, it is important to maintain the optimum physical vigor and health of the individual as a means of increasing his resistance to all types of stress In this sense the entire field of preventive medicine is important in the prevention of both physical and mental illness

In addition, however, the early detection and eradication of brain tumors, syphilis, and other specific organic pathology associated with mental disorders is a paramount factor in the effective treatment and control of these particular disorders. Paresis alone accounts for some 4 per cent of mental hospital admissions. It is directly preventable. Public health measures for the control of syphilis and other diseases have been undertaken throughout the United States, and increasing importance is being placed upon periodic medical examinations in order to discover early any evidences of organic pathology The cooperation of the general public with our health agencies should be particularly effective in reducing the number of organic psychoses through early detection or prevention of the organic pathology known to underlie them

Eugenic measures. Eugenic measures include efforts directed toward insuring good heredity, good embryonic and fetal development, and a normal, safe birth—in short, a good prenatal endowment In discussions of eugenics, most emphasis is usually placed upon the importance of good heredity and upon measures (such as the control of marriage, sterilization, birth control, and abortions) designed to prevent the birth of children with adverse heredity. Several states have legalized the sterilization of mental defectives, and many advocates of controlled breeding would like to have the same provisions extended to antisocial personalities, schizophrenics, and other mentally ill persons Certainly, it is reasonable to emphasize the importance of good heredity for a good start in life. For the future of the species, there are possible advantages in selective breeding—or at least in exercising some control over who provides society with the bulk of its children For example, until the last few years the college-trained population has not reproduced itself (that is, the average number of children per family among college graduates has been only 1 7) whereas in the lowest socio-economic levels families are traditionally large But the role of heredity in schizophrenic disorders, antisocial personalities, neuroses, and other mental disorders is so poorly defined that the value of applying genetic regulations would be extremely questionable except perhaps in very isolated cases where the entire family tree appears tainted with psychopathology As we have pointed out, disturbed parents probably pass their characteristics on to their children more through education and example than through genetic transmission.

Measures carefully designed to prevent

accidents and to insure a healthy development during the embryonic period are usually a part of good obstetric practice and are not ordinarily considered a part of a preventive program against psychopathology. But, as we have seen, there is reason to believe that injuries and developmental deviations occurring prior to birth are often an important factor in later faulty personality development. As medical research progresses in this area and as the conditions necessary for optimal prenatal development are worked out, there is every reason to believe that we will be able to do a great deal toward reducing constitutional predispositions to psychopathology. At present, the frontier of constitutional medicine is just beginning to open up.

PSYCHOLOGICAL PREVENTIVE MEASURES

The psychological aspects of prevention center around the development of strong, socially adequate, and well-integrated personalities. As we have noted, it has been only recently that we have fully recognized the importance of psychological factors and particularly of early personality development in the development of psychopathology.

Although childhood is an especially crucial stage for future happiness, difficulties can develop at any stage of life. Our needs and problems change considerably as we pass through different life periods, for each age has its own particularly pressing needs and important adjustments to make. Thus psychological measures for preventing abnormal behavior must be aimed toward preparing and helping people to deal effectively with the normal life stages through which all human beings pass. Both present and future welfare will be at stake, for successful and happy adjustment at any one stage, while a goal in itself, is also essential for preventing serious difficulties from developing at a later stage. Thus the early detection and treatment of pathological trends or adjustment difficulties will be an important aspect of prevention.

Later in the chapter we shall find that many agencies have been established to deal with specific types of problems arising at different ages—child guidance clinics, marital counseling, vocational guidance, parent-teacher groups, youth centers, activity projects for older people, and many other programs attempting to help people with the normal difficulties of life that even the "well-adjusted" person may have considerable trouble in handling successfully.

Special needs during childhood. Concepts of child-rearing and of children's needs have changed radically in recent years. At the present time there is quite general agreement on the following principles with regard to infants and preschool children: (1) adequate mothering during infancy, (2) self-demand feeding schedules, (3) freedom for the child to follow his own pattern of developmental needs, which implies that toilet training, "manners," and other lessons in social living are to be given casually and in a friendly manner, when the child is ready and not before, (4) consistent parental discipline and other values which provide the child with adequate reality and ethical models but which do not unnecessarily restrict his reality testing; (5) most important, a loving atmosphere in which the child is respected as an individual and made to feel that he is an important member of the group.

We have seen continually throughout this volume what a very large part faulty parent-child relationships do play in the development of abnormal behavior, thus one of our most essential areas of psychological prevention must be parent education. Partly, this will mean a spreading of information about children's needs and developmental patterns, but this is only the first step. Parents have their own needs and limitations, and in many cases the faulty relationships they establish with their children are a reflection not of their ignorance of principles of child guidance, but of their own insecurities, tensions, dependency needs, hostilities, and so on. In addition, prob-

lems arising in connection with their children are apt to be highly ego-involved · misbehavior or slow development on the part of the child is often evaluated by the parent as a threat to his own capabilities and general worth Hence it is something he cannot tolerate, and we often see parents protecting themselves from self-devaluation by various defenses such as "denial of reality" or attempting to "stamp out" or suppress the misbehavior at all costs Parent education, then, will often necessitate parent *counseling*—counseling which will be concerned both with the children's problems and with the parents' own (Whitman[11])

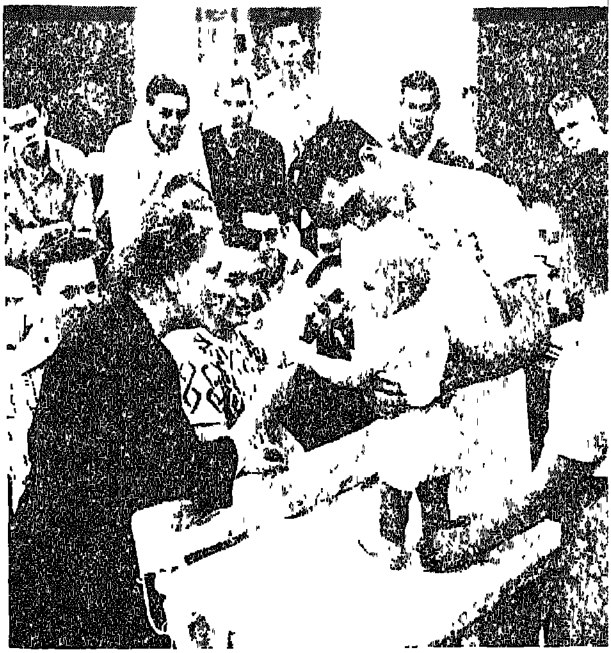
As a child reaches school age and begins to move out from the family into the world outside, the conditions that made good adjustment possible in his earlier years will no longer suffice now He still needs emotional support from his parents, but it becomes increasingly important for him to have the experience of close friendships with other children, and membership in a group of his peers. He becomes more actively interested in his "gang" than in his family, and is often more responsive to its opinions and standards than to those of his parents. Though this tendency is often difficult for parents to accept, it is healthy and normal for him, and is suppressed by them only at great cost to his normal development For it is in such activities that he acquires the social skills and independent self-reliance essential for group participation then and in later life During these grade-school years, too, we find rapid development of conscience · the child learns to inhibit his sexual and aggressive impulses, and with his contemporaries sets up standards of group behavior that may be even stricter than the standards of parents or teachers

The difficulties a child may experience in this period are many. Traumatic experiences or parental overprotection may undermine his self-reliance and lead him to cling to his parents instead of forming close relationships with his peers. Parental rejection or lack of physical or social skills may lead to emotional and social withdrawal, and so on The tensions and anxieties resulting from such difficulties often lead to antisocial and other undesirable adjustive reactions which may not only aggravate the immediate adjustive situation but interfere with his subsequent adjustment during adolescence and later life Thus parents and adults close to the child can have an important part in preventing abnormal behavior if they provide conditions essential to normal personality development in childhood and prepare him for the physical and emotional changes that adolescence will bring

Adjustment in adolescence. As we have noted, adolescence is a particularly difficult period in our society, due partly to the lack of adequate preparation for the problems to be encountered in the adolescent period and partly to the fact that our society offers no clear-cut and consistent rules and standards and gives its teen-age members no important social or economic role which could channel their energies and lead to feelings of adequacy and personal worth The adolescent has several specific problems too he must learn to deal with a sexual drive that his biological maturation is bringing to great intensity, work out less direct, socially acceptable channels for the discharge of hostility, and prepare himself for induction into his role as an adult member of society In the process, he must emancipate himself from his parents and assume responsibility for his own life and the pursuit of his individual interests. His relationships with his age-mates become of increasing importance For the first time, the adolescent begins to see his parents and home "as they really are," and to understand that adult social institutions—government, business, the church—are not the perfect institutions he has believed

All these changes in the adolescent lead him into tremendous conflict not only with his parents but within himself Depending on his individual childhood experience with sex, he accepts his strange new sex drive and his new sex role with equanimity or with concern.

Increasingly, schools are concerning themselves with preparing students to live in a modern world as emotionally mature citizens. Denver high schools are among several offering regular courses in family living. Courses begin with a study of personal growth and development in which students gain an understanding of the physical and emotional changes that come during adolescence and talk over problems in connection with making friends, dating, and their home situations. There are discussions of emotional reactions, why people react as they do, general problems of human relationships and, more specifically, the factors which relate to success in marriage, including a consideration of family background, differences in religion, age, and education, and the personal adjustments required in marriage and throughout life. Courses then continue with related responsibilities in other areas, such as establishing a home, money management, and the care of children (right). In work with young children adolescents can trace the origins of many of their own behavior patterns and attitudes.



Carl Iwasaki

Often parents are reluctant to have the child leave home, are outraged to have him question or criticize them, are offended by his new attitudes toward himself and society. Often they resent also his extreme interest in the opinions of his fellows and his dependence upon their tastes and fashions. The strength of the group opinion in the adolescent culture is enormous, since the adolescent, in his breaking away from home, is usually unsure of himself and feels strongly the need to "belong." The average teen-age boy or girl, feeling it imperative to be an "in" rather than an "out" at school or college, is usually afraid to voice any opinions or interests that will make him appear "different."

The adolescent, in the midst of all these conflicts and new experiences, badly needs the emotional support of parents who have sufficient insight themselves to understand what he is going through and to interpret it to him. And again, for parents who do not have this insight or seem unable to cope with problems that arise, counseling services in the community may be of invaluable assistance.

Crucially important, too, is the school, for more and more our society is coming to regard the school as responsible not only for the intellectual development of students but for their emotional and social development as well. Classes are given in many subjects which prepare students specifically for problems in adult life: community health problems, marriage relations, and so forth. The modern school fosters the adolescent's criticism of existing conditions and his glowing idealism, and tries to direct them toward useful ends. It tries to help him gain some understanding of his own and others' emotional problems, through courses in mental hygiene and through interpretations of novels, plays, poetry, movies, and radio dramatizations.

In addition, the schools are taking increased responsibility for determining students' abilities and special interests and helping them to plan academic work that is best suited to them. Educational adjustment during high-school and college years is a prerequisite to the best vocational—and emotional—adjustment later on. A course of study that is too

easy or too hard or that is uncongenial to the individual's interests and special talents may lead to a feeling of frustration because of abilities not actualized or because of unrealistic or too-high aspirations. If the individual's feelings of confidence and adequacy are to be fostered he needs the experience of succeeding in school, so he will not be left with feelings of failure, envious comparisons with more successful students, and inevitable self-devaluation.

Adolescence is not a time of stress and turmoil in all cultures. Where the adolescent has a well-structured role, contributes to the social group, and has assured status, he does not suffer the insecurities and fears of our adolescents or exhibit the extreme behavior many of our adolescents manifest in their attempts to feel important and worth while. In proportion, then, as we encourage and plan for a useful part for our adolescents to play in their community, and in so far as we are able to solve our own uncertainties and provide a stable social and economic setting in which they can see a meaningful place as they reach adulthood, we shall be fostering mental health and preventing abnormal behavior.

Along this line—speaking particularly of the shortcomings of our society in the vocational roles it offers its young people—Frank[16] says:

"If we are persuaded that mental hygiene has the significance we have here assumed, and if we are to be guided by the implications of our growing knowledge of personality development, we must acknowledge that most of the contemporary careers we urge upon youth are in truth but defenses against anxiety and emotional defeat—competitive struggles for power, prestige, or property that reflect the childhood insecurities from which the individual is fleeing and that threaten him with new insecurities from the other aggressive individuals he must challenge. Such designs for living are neither mentally hygienic nor socially desirable. . . . The youth of today, no less than the youth of other days, wants to be given tasks that arouse his enthusiasm and promise fulfillment of his aspirations. If we are to be sincere, we can but point out the futility of the competitive struggle that leads to no personal fulfillment because it arises from inner personal distortion and insecurity which no achievement, property, or prestige can assuage. In contrast, we can try to give youth an understanding of how his or her personal life may be made significant and enriched, not merely by achievement or acquisition but by the quality of human relations he or she can sustain." (p. 538)

Vocational adjustment. It is sometimes startling to realize the amount of time that the average employee spends away from his family, at work. A saleswoman may spend more time behind the counter with her fellow-clerks than she does with her adolescent children. A businessman may spend more time talking to his colleagues than he does talking to his family. In economic and social terms, the importance of work is enormous. Upon a society's economic efficiency and productivity depends the standard of living of all its members. For the individual worker and his family, the general "standard of living" has very specific and important consequences. Adequate wages are necessary to insure minimum physical conditions of life, work commensurate with his abilities and friendly cooperative relationships on the job are essential to his mental equilibrium, reasonable security is necessary to avoid the harmful effects of worry and uncertainty. Freedom from worry, a sense of self-respect and accomplishment, hope for the future—all of these underlie happy family life and are fostered by healthy occupational adjustment. On page 584 are briefly listed some of the accomplishments of psychiatry in industry in fostering vocational adjustment and mental health. As we have gradually come to realize the role of the individual's whole life situation in his degree of mental health, the contributions of occupational, marital, and other adjustments have been given increasing attention.

Mental hygiene in interpersonal relations. Currently, a flood of literature has welled from the realization that in order to achieve an effective adjustment to the surrounding world, an individual must learn to get along successfully with other people. Of great importance to all of us is a feeling of competence in dealing with people, of having good friends, and of "belonging" to a group. From a more materialistic point of view, "success," as measured by occupational advancement and the accumulation of material possessions, is heavily dependent upon one's social skills

The goals of the "how-to-make-friends-and-money" literature are important ones Modern psychiatry has not found, however, that such material really helps people to attain these goals First, it does not tell the reader how to change himself so that he *can* follow the rules and formulas it lays down Information about etiquette and grooming can be helpful to people who are basically well socialized and need only to learn a few social techniques for greater poise and self-confidence in their relations with others. Often the "advice" given, however, is impossible to follow because the individual is blocked by underlying personality maladjustment Concentration on techniques and rules of behavior will not conceal or change one's basic attitudes If one feels intense hostility toward people, it will show through his best attempts to create a charming exterior Such hostility may be thinly disguised, or it may come out in more devious ways, as we saw in the case of Clare (see pages 114-115)

The second difficulty with the "how-to-be-successful" literature is that too often it is used with the idea of exploiting others, of making people do what we want them to do regardless of their own needs and interests In so far as this is true, such techniques are not conducive to healthy interpersonal relations or to the mental health of the person using them Over a period of time, devices motivated by a desire to gain an advantage rather than by a positive interest in others, will lead to a deterioration in interpersonal relationships and human values

Generally speaking, what *can* modern psychiatry offer in helping us to get along with others and to feel more accepted and happy? *First,* in order to have good interpersonal relationships, we must have a sincere, positive interest in other people We must share their successes, hopes, and failures, sincerely wish them well, and regret seeing them pushed down, as often happens in our highly competitive society *Second,* we must like and accept and understand ourselves if we are to like other people and be able to get along with either them or ourselves As Liebman[26] puts it "Self-understanding rather than self-condemnation is the way to inner peace and mature conscience" We have already seen that self-acceptance is one of our basic psychological needs, and that the lack of it is found repeatedly to be an important part of neurotic, psychotic, and other abnormal behavior We now see its role in everyday interpersonal relationships If we cannot accept ourselves and are so maladjusted that our main energies are directed toward the solution of our own conflicts and frustrations, we will have little time or energy to expend on others, our ego defense mechanisms will be working overtime, we will not be in a position to be completely honest with either ourselves or others, and our relations with others will suffer from our own irrational actions—regardless of how many "techniques of human relations" we may study in books and magazines

Nor can we decide, by an act of will, to acquire an interest in people. Because our adjustive techniques and habits are rooted in our whole cumulative history of self and environmental evaluations, largely unconscious, it may be necessary for an individual to have psychiatric help in resolving inner conflicts before he will be able to accept himself and come to feel a real interest in others

Marital adjustment. Among the adjustments typically involved in adult life is marriage. A compatible marriage is based upon the mean-

ingful sharing of experiences and the formation of deep emotional bonds It helps both partners feel adequate, wanted, needed, socially approved, and secure—to a degree which cannot be achieved in any other human relationship. Where a compatible marriage is made even more meaningful and worth while through children, it becomes a strong family unit which contributes to the parents' sense of accomplishment and happiness, increases their security and satisfaction in middle and old age, and at the same time provides the good emotional environment so important to the children

Unfortunately, many modern marriages are contracted without adequate preparation and lead to bitterness, disillusionment, and unhappiness. One out of every three marriages, as we have seen, is now ending in the divorce court. These cold statistics represent a serious failure in human relations Both partners may have entered marriage with high hopes and confidence of success which, when shattered, leave both of them shaken and bewildered When a divorce breaks up a marriage of many years' duration, the wife particularly may find life difficult For while the husband may remarry a younger woman with relative ease, the wife, especially after thirty-five, may find her marital possibilities considerably reduced so that it is increasingly difficult to establish a successful new marriage The children suffer from divorces, not only in terms of the immediate trauma of the breaking up of their homes, but through subsequent divided loyalties, a lack of adequate models, and other factors which may influence their entire development thereafter

The question that concerns us here primarily is what can be done to promote better marital adjustment What are the basic factors underlying successful marriages and what conditions are conducive to unhappy marriages?

A number of studies in this area have emphasized some of the following factors in unhappy marriages (1) emotional immaturity of either or both partners, often with unrealistic and "idealistic" attitudes toward marriage and little conception of the duties and responsibilities involved; (2) incompatibility due to differences in age, intelligence, religion, values, etc.; (3) physical or sexual incompatibility, (4) lack of common goals concerning children, how to spend money, leisure time, etc.; (5) adverse environmental factors such as interfering in-laws, poor health, or insufficient income, (6) faulty parental training in sexual attitudes, (7) an unfavorable early home life, including bickering, tension, or parental rejection, making for later difficulties in giving and receiving affection

Such studies, confirming what has been generally discovered in clinical practice, suggest that the prevention of maladjustment in marriage can best be conducted along three lines (1) insurance of an adequate home life and early childhood conditions conducive to healthy emotional development, and an adequate home "model", (2) specific preparation for marriage in terms of an understanding of duties, responsibilities, functions, and various other reality and ethical considerations relating to marriage and family life; and (3) early psychiatric attention to marriages which are "sick" This last point may involve treatment of the personality problems of one or both partners. In addition, it has been found possible through tests, discussion groups, and counseling, to help engaged and married couples clarify their motives in connection with marriage and understand the factors essential for achieving a happy marriage Later, in our review of present mental hygiene facilities, we shall see that the prevention and treatment of marital difficulties has received a great deal of attention, and that many groups have been active here

Philosophical adjustment. It is an accepted fact that "man does not live by bread alone" In our present stage of world history, the truth of this statement cannot be questioned, but it is another matter to find the "something more" than bread which will prove satisfactory amid world conflict, ideological warfare,

and rapid social change. Modern technology, in its tearing down of our older social and religious values, has not yet given rise to new values fully productive of human happiness. Many people, unable to find any enduring faith, conclude that life is isolated, trivial, and ultimately meaningless. They find themselves living in this "Age of Anxiety" without any adequate, socially rooted philosophy of life. Unable to order their ideas and feelings and experiences, they begin to lose effective understanding of and direct relation to their environment. They fall victim to weird attitudes, philosophies, and practices. Such states of mind are fertile ground for mental disorders. Thus it becomes highly relevant to our search for preventive measures in mental hygiene, to consider some of the factors which now appear essential to an adequate philosophical adjustment: one that will predispose an individual to mental health and generally effective adjustment.

Although different persons find meaning and reward in different areas of life—some in family life, some in social service, some in intellectual or professional work—certain basic assumptions are commonly made by mentally healthy people. Some of these assumptions are accepted on faith, some are accepted in the light of our historical development, and some are well bolstered by experimental evidence. Those listed below are not presented as eternal values, nor as the only values held by rational and healthy people in our society. Nor are we even arguing for their validity. Our chief interest in them here is that the holding of them seems to be coexistent with mental health and social usefulness in those who share them.

1. A belief in the importance and worth of every individual.
2. A belief that social progress is both possible and worth while.
3. A belief in the value of the "truth" that we try to approximate by means of modern scientific techniques, and in its usefulness for social progress.
4. A belief that democracy, with its respect for the individual, provides the most congenial atmosphere for the pursuit of truth, and for the happiness and progress of both the individual and the group.
5. An acceptance of individual responsibility for carrying forward the social progress made by preceding generations.
6. A belief in mankind as a functional part of the universe, with potentialities for evolution that can be fulfilled.
7. A belief that brotherly love and other fundamental tenets of Christianity and other great religious philosophies are not only compatible with modern, democratic society but actually indispensable to it.

The "philosophy" we are talking about here is not just an intellectual set of principles, but an expression of one's own *Weltanschauung* or world-view, as determined by his emotional as well as intellectual experience. When people report great difficulty in finding "meaning" in life, it usually indicates that their experience in life has been unsatisfying and that due to inner conflicts, their personalities are not well integrated. Young people, who do not yet know how to organize all the conflicting elements of their life experiences, and people in situations of extreme or long-continued stress, such as war or poverty, typically report difficulty in understanding "what life is all about." With a change in the environment or in their way of looking at it, they no longer seek to find some single, mysterious, inner "meaning" of life, but can organize their attitudes and experiences in some such working philosophy as we have outlined above. In more serious instances, when an individual is completely unable to find coherence or satisfaction in his life experiences, psychiatric treatment is indicated. Psychiatry does not itself provide him with a philosophy, but it can help him to become emotionally mature enough to work out new evaluations—values—which will be conducive to greater mental health.

Preventive measures in later maturity. As people move on through maturity into their later years, they are faced with many new and difficult problems of adjustment. Again, as in childhood, they become more dependent upon other people, economically, socially, and physically. Their children grow up and take up full lives of their own away from home, often leaving the parents feeling lonely, insecure, and unneeded. Their sexual life diminishes somewhat with the climacteric, frequently arousing strong anxieties and adding further to feelings of loneliness and inadequacy. For the man, retirement or joblessness represents an additional adjustive burden. And for most older people, the difficulties of this life period are accentuated by the loss of contemporaries (perhaps including husband or wife), physical infirmities and chronic diseases, and the psychological problem of accepting the inevitable changes in one's self-evaluation and life situation brought about by aging.

As we have seen, older people are a growing proportion of our population. In 1800, a newborn child had a life expectancy of 35 years, in 1900, 45 years, in 1950, 70 years. With so many more people now reaching old age than ever before, the occupational, health, and general social problems presented by this segment of our population are engaging increasing national attention.

In Chapter 8 we devoted considerable attention to the problems of older people in our culture and saw that their uncertainties are reflected in the high incidence of senile psychoses and cerebral arteriosclerosis. We saw that the development of psychosis was more closely related to the individual's psychological stresses than to brain deterioration, and that a senile psychotic reaction might even be reversed with a change in the life situation of the patient that gave him a new feeling of being needed. Thus it becomes vitally important for us, as individuals and as a society, to do everything within our power to make it possible for older people to achieve satisfaction of their basic psychobiological needs for physical and emotional security, belonging, adequacy, approval, and so on. Older people need to know that they and their lives are appreciated, wanted, valued, that they are still loved even though they are no longer at the peak of material usefulness and that they can continue in creative activities. (See pages 580-582)

SOCIOLOGICAL PREVENTIVE MEASURES

In the preceding section we have focused our attention upon the kinds of psychological adjustment that contribute to mental health, but the problems of occupational adjustment, marital adjustment, and so on are also, of course, sociological problems as well. Thus our emphasis upon the prevention of mental illness leads us a step beyond psychiatry proper, into the realm of *sociology*, or the study of societies.

As we have come to realize more clearly the importance of "social pathology" in the production of individual abnormal behavior, there has been a trend toward the fusion of sociological and psychiatric concepts and research, and of sociological corrective measures with mental hygiene programs. Since the sociological level of prevention of abnormal behavior involves the diagnosis and correction of social as well as individual pathology, there is reason to believe that this cooperation in research will be increased. For before we can undertake effective preventive measures, we must be more clear as to just what constitutes social pathology and what methods will be most efficient in correcting it.

Despite our present limitations in knowledge, the accumulation and coordination of facts to date and the ramified research under way forecast a not too remote day when we shall be actually grappling with the social causes of mental illness—not on the basis of guesswork, moral indignation, and hit-or-miss remedies, but on the basis of scientifically established knowledge. We may, in short, be able to reach as directly and immediately into those environmental conditions contributing

to mental illness as we now do, with trained specialists and effective techniques, into the poor sanitary conditions favoring epidemics.

Sociological research into the environmental factors relating to abnormal behavior is being carried on along at least four fronts:

1. Studies of the incidence of abnormal behavior
2. Research into the social origins of abnormal behavior
3. Evaluation of current preventive and therapeutic efforts
4. Planning of more effective preventive measures

We can best understand the importance of such studies by briefly considering what has been done and what is being done, and what studies are proposed or indicated. Here we shall be concerned with the United States, and shall defer until a later point our discussion of research undertaken and proposed on an international level.

Studies of incidence. The incidence of mental illness has not yet been thoroughly studied sociologically. We have previously noted studies of the "ecological" type in which the patterns of abnormal behavior have been described with respect to the geographical areas of large cities. We have also mentioned studies based upon draft and Armed Forces data and census statistics, and other studies indicating the socioeconomic distribution of various types of abnormal behavior. These studies have revealed much interesting and valuable information. For example, one finding from ecological studies was that

"Persons residing in areas not primarily populated by persons of their own ethnic or racial groups show much higher rates [of mental illness] than those of the numerically dominant group." (Dunham[11], page [illegible])

Similarly, studies based on Selective Service data have shown an increasing incidence of mental disorders from higher socio-economic levels to lower ones. Although these findings do not indicate much about the origin of mental disorders, they do indicate ways in which geographical "trouble spots" can be determined where preventive action should be concentrated.

In general, we must admit that the amount of usable, reliable information we have on the extent of abnormal behavior and its pattern of distribution within our population is very slight. With more adequate knowledge our mental hygiene program will become increasingly effective.

Research into the social origins of abnormal behavior. Studies of social factors have done much already to illuminate the influence of the social setting in general upon the content and orientation of the personality. Studies of widely differing cultures indicate certain basic personality configurations in certain societies, or in sub-groups within them (class, ethnic group, and other status sub-groups). For example, paranoidal suspiciousness may pervade the reaction patterns of one society or group, self-effacing noncompetitiveness those of another, and passivity and occasional violent release those of still another (Fortune[15], Benedict[5], Bateson and Mead[3]). In fact, out of such studies has emerged an important hypothesis: that within each society there exists a basic character or personality structure, with variations among individuals determined by class and other differentials (Benedict[4], Kardiner[19,20], Dubois[9], Fromm[17], Bateson and Mead[3], Gorer[18], Linton[27]). This literature not only is fascinating to the student of abnormal psychology, but has great potential importance for mental hygiene and treatment. If developed much further along present lines, it can eventually give us a social etiology on which we can base the treatment and prevention of mental illness in our particular society, and in the special sub-groups within our society.

Some studies of "primitive" peoples have revealed the personality disorientations occurring when western civilization has disrupted the old tribal patterns. From this

knowledge of the effect of cultural patterns and cultural changes on individual personality, it has become possible to understand, partially, certain comparable effects in our own society Thus,

"The highest incidence of certain types of mental disorder, of suicide, of crime, and other forms of deviant behavior has been found in areas of high mobility and disorganized community life, with their accompanying anonymity and loneliness" (Felix and Bowers[11], p 132)

From Army psychiatric experience, Dr William Menninger[31] emphasizes the apparent importance of the *group factor* in the etiology of mental illness

". Far more impressive in the adjustment process than the history [of maladjustment in the individual or his family] or the personality make-up or the internal psychodynamic stresses, was the force of factors in the environment which supported or disrupted the individual . . We seemed to learn anew the importance of the group ties in the maintenance of mental health We were impressed by the fact that an individual who had a strong conviction about his job, even though his was a definite, unstable personality, might make a remarkable achievement against the greatest of stresses" (p 580-581)

Such studies, bearing directly upon mental illnesses, are supplemented by broad sociological studies of communities, classes, and other population groups, illuminating individual problems by filling in the social background—group standards, ideals, mores, and the degree of individual conformity expected (Lynd and Lynd[29,30], Veblen[39], Warner[40], Myrdal *et al.*[32]) All this information is invaluable in understanding personality development, origins of maladjustment, and the effects that the individual's interactions with group forces have on his mental health. It is especially useful in combination with the other types of research described and with the main body of psychiatric and clinical psychological findings

But while social science has made great progress in the last twenty or thirty years, much research remains to be done if we are to understand how to change society in such a way as to promote mental health As Felix and Bowers[11] say of this research, "The literature is fragmentary and presumptive rather than experimentally compelling" They sum up as follows the amount and type of research we need in this field

"a) We need intensive socio-clinical studies of various types of mentally disordered people, including their families These will help us in relating clinical symptoms and the dynamics of the disorder to the broad psychological and social setting

"b) We need similar studies tracing individuals from birth through all the stages of life

"c) Cross-cultural and cultural group studies should be intensified by adequate life-history and clinical data

"d) Pediatricians, physicians, and psychiatrists should obtain full data on their patients, including sociologically relevant information, which could then be centrally analyzed and utilized in sociological research and preventive action

"e) Personality reactions to the many abrupt and often traumatic changes in life, such as unemployment, death of parents, divorce, old age, imprisonment, and so on should be studied

"f) Finally, we need more laboratory studies of specific personality mechanisms, such as frustration, repression, substitutive processes, etcetera" (p 141)

Evaluative research. Mental hygiene programs carried on by public and private organizations, nationally and locally, have not been intensively evaluated to determine their effectiveness in remedying unfavorable environmental factors. The same is true of the many loose-knit community efforts—counseling services, social work, psychotherapy undertaken by psychiatrists and clinical psychologists, and many community-sponsored projects It is the general feeling of those working in the field that these measures are proving highly effective in fostering mental health

If they are to be modified in the direction of maximum efficiency, however, we must have additional experimental research data on which to base our improvements

Planning of preventive measures. Present group programs of prevention—such as anti-delinquency projects, the establishment of psychiatric clinics, public education, racial tolerance drives—may eventually do much to improve the mental health of our nation Their value should not be underestimated But there is still need for more effective co-ordination of biological, psychological, and sociological preventive measures based on greater knowledge of the extent, origin, development, and most effective treatment of abnormal behavior All aspects of our prevention programs are handicapped by a lack of precise data and guiding principles based upon comprehensive research Likewise we must increase the scope of our preventive measures so that more people will be able to benefit from them

The responsibility for carrying out sociological preventive measures—for establishing a healthful environment for people and modifying society in the light of research findings—falls heavily upon all the institutions to which we belong and so upon us as members. Primarily, in the twentieth century it falls upon the home, the school, industrial organizations, and the government (local, state, and federal). Gone is the relative self-sufficiency of a hundred years ago, and the old idea that each individual should be able singlehandedly to make a successful adjustment to life With greater interdependency has come greater mutual responsibility for each other's welfare and greater need for careful joint planning in the best interests of all We now feel that it is up to society to see that the individual is provided with certain essential skills and with sufficient security to enable him to make successful occupational, marital, social, and philosophical adjustments An intelligent society will take all possible steps to set up a general socio-cultural climate which not only permits healthy personality functioning and growth but is actively conducive to it

The following sections will be concerned with a description of the preventive measures that our society and certain international organizations have undertaken and are carrying forward, in an attempt to fulfill the public responsibility for the mental health of individuals here and in other countries To allay the fears and anxieties that make for so much unhappiness and abnormal behavior in our age, a mental hygiene movement of truly staggering proportions has developed.

ORGANIZED EFFORTS FOR MENTAL HEALTH IN THE UNITED STATES

As public awareness, interest, and effort have been directed toward our contemporary mental health problems, an increasing number of professional and lay organizations—employing preventive measures or treatment or both—have begun a coordinated attack on the prevention of mental illness and the promotion of mental health. These include governmental agencies, private professional organizations, volunteer organizations, and various professional groups not directly concerned with psychiatry which nevertheless use its concepts every day as an integral part of their work

THE GOVERNMENT AND MENTAL HEALTH

Growing public awareness of the inadequacy of existing mental health facilities eventually led to the passage in 1947 of *The National Mental Health Act,* which has launched a far-flung program to attack the nation-wide problem. It not only finances directly many needed specific projects but also

Government Program under the National Mental Health Act

Assistance ($8,666,000 in 1950)

1 Research grants to expand laboratory and clinical research.
2 Grants for training of psychiatrists, psychologists, psychiatric social workers, nurses.
3 Grants to states for mental health services and community activities (seminars, workshops, clinics, surveys, etc)

Operational activities

1 National Institute of Mental Health at Bethesda, Maryland—training center and clearing house for psychiatric information, conducts surveys, research projects, and educational activities, and functions as nerve center for activities under the Act
2 Prince Georges County (Maryland) Clinic—model community clinic, set up by Public Health Service in cooperation with numerous local organizations to show other towns and counties how to undertake mental health measures Provides regular diagnosis and treatment and studies each case for its community as well as its individual significance, with the hope of establishing principles for prevention of abnormal behavior Staff includes 2 psychiatrists, 1 clinical psychologist, 2 psychiatric social workers, and a mental health nurse (See page 576)
3. Mental Health Center at Phoenix, Arizona—field demonstration unit to show potential influence of a clinic on general community health by fostering psychiatric orientation in existing organizations, training and assistance given to staff members of local agencies occupies 70 per cent of the Center's time, case consultation and clinical service 30 per cent

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coordinates and assists in the activities of private organizations, institutions, and individuals already working in the field The program under the Act is outlined above. Fifty-one states and territories now participate with mental health programs and receive federal funds on the basis of population, financial need, and extent of program Each state must provide one dollar from its funds for every two federal dollars granted to it.

Through the combination of these appropriations with state funds, a wide range of vital mental health activities has been made possible. States have made surveys of mental health facilities Clinics have been expanded in number and scope, with thirty-six new clinics established in the first year of the Act alone Funds have been made available for research, and for increasing the staffs of hospitals and clinics Perhaps most important of all, extensive educational campaigns have been conducted for the general public, and for professional workers—general physicians, nurses, teachers, and others dealing with the public—aimed at developing a general psychiatric orientation in the nation, especially in professions most directly concerned with mental health and social welfare For example, in one month in 1949 the following educational measures were undertaken, a three-day neuropsychiatric seminar in Orangeburg, South Carolina, was conducted by some thirty speakers of national reputation, discussing such topics as alcoholism, schizophrenia, court psychiatry, and prevention, a thousand Cleveland school delegates attended a workshop on "Emotional Health", in Minnesota, a sex-education seminar was sponsored by the State Departments of Education and Health; an institute for physicians was held in California and one for nurses in Illinois

In addition to the program under the Na-

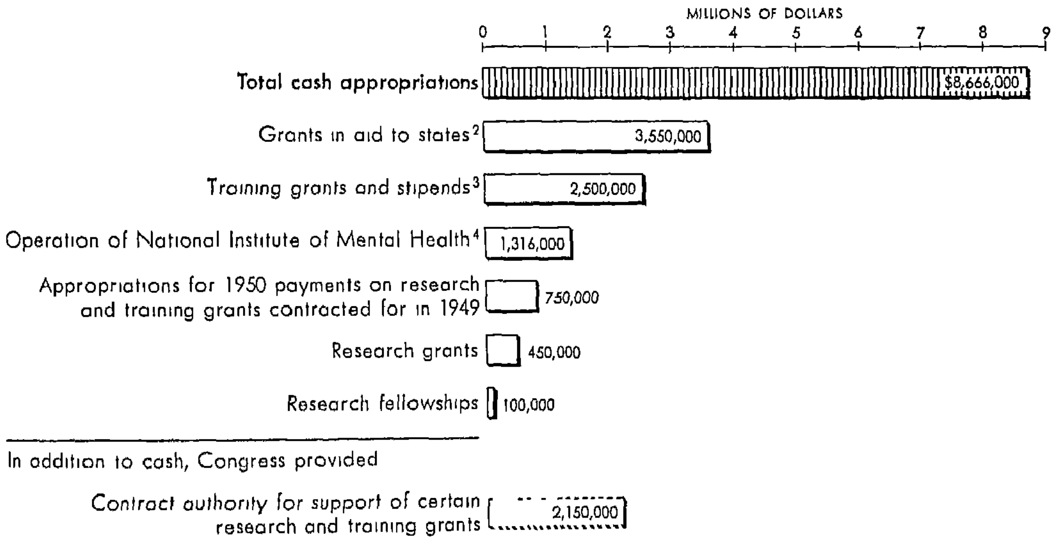
tional Mental Health Act, both federal and state governments carry on numerous other activities relating to mental health Under the Social Security Administration, the Children's Bureau, through its Mental Health Unit, extends many kinds of aid, including mental health measures and many free pamphlets for the guidance of parents throughout the country. The Veterans Administration, following the modernization of its methods after World War II, has now become a leader in the treatment of the mentally ill, providing funds and facilities for the education and training of psychiatrists and clinical psychologists and pioneering in research and practical programs for the more effective handling of mental patients These activities have spurred improvement of state institutions

The states have in the past established, maintained, and supervised their own mental institutions as well as welfare departments and, in some cases, separate mental hygiene departments Within each state, there are county and municipal organizations operating welfare departments, social work agencies, local clinics, juvenile bureaus, educational programs, and other activities, often working in collaboration with private organizations.

PRIVATE NATION-WIDE PROFESSIONAL ORGANIZATIONS

An inestimable amount of valuable work has been done by the numerous private organizations operating in the mental hygiene field on a national basis Undoubtedly their nation-wide memberships and their activities of many years have played a major part in bringing about the public awareness of the critical importance of mental hygiene which led to the National Mental Health Act Their usefulness has not ended, however, with the initiation of federal aid and leadership They still have vital missions to carry out, and still form the backbone and preponderance of the forces working for improvement of mental health conditions

CASH APPROPRIATIONS BUDGETED FOR FEDERAL GOVERNMENT'S PART IN THE NATIONAL MENTAL HEALTH PROGRAM DURING 1950[1]



[1] *Source of data National Institute of Mental Health*

[2] In 1949, about half the state funds were spent for community clinics About 200 *stationary clinics and traveling clinics to 49 rural areas received* federal support in 1949 The rest of the state funds were spent for professional services and educational activities— including training of mental hygiene personnel to work within the states

[3] In 1949 with funds just over half this amount 35 per cent of which were used for stipends to graduate students the program financed the training of 80 psychiatrists 53 clinical psychologists, 65 psychiatric social workers, and 86 psychiatric and mental health workers

The activities of the National Mental Health Institute include (a) research (apart from that supported separately) (b) mental health consultant service for the states, (c) the demonstration projects at Prince Georges County and Phoenix, (d) field studies of mental health facilities in various states, (e) a public information program, (f) statistical surveys of mental patients







Psychiatry in Action Through Clinics and Special Projects

The Prince Georges County (Maryland) Clinic demonstrates how a community may benefit from a clinic set up to diagnose mental disorders and treat mild ones before they become severe. At left, Dr. Mabel Ross, head of the clinic, is giving a little girl an aptitude test. Established in 1948, under the sponsorship of the Public Health Service, the Clinic not only provides treatment for both adults and children, but is prepared to advise other communities interested in establishing similar clinics (Ross[35]). Under the National Mental Health Act, community clinics get high priority for grants in aid, through the states. (See page 574)

At Public School No. 33 in New York City, the National Committee for Mental Hygiene, in cooperation with the local Board of Education, has established a demonstration project, the principal aim of which is to show teachers specific techniques for applying mental hygiene in the classroom. A special mental hygiene worker has been added to the school staff. Her functions are fourfold. (1) She takes a developmental home record of each child enrolled in the kindergarten. (2) She selects children who need special help in adjusting to school and meets with them in small groups for play, storytelling, singing, and so forth. At left, for example, children are deliberately given plenty of space to manipulate toys as they wish, and to make social contacts or be free of them; this last is often especially important for a child who is in a crowded classroom, or one who is perhaps the second of four or five children at home. Through these sessions too, the worker can study a child's emotional patterns and problems in order to advise the regular teacher. (3) She holds conferences with teachers, and with school administrators, school social workers, and the nurse when needed. (4) She holds a weekly consultation period for parents (Adlerblum[1]).

For more than sixty years the Child Study Association has helped perplexed parents to gain greater insight into their problems. Group counseling (shown at left) has been found to be particularly effective. Not only are parents helped with specific problems that are vexing them, but they achieve a new objectivity and a greater understanding of what may be reasonably expected of children at different ages. (See page 578)

National Professional Organizations Concerned with Mental Health

American Psychological Association (APA)	Professional organization of American psychologists Publishes periodicals concerning all phases of personality development and functioning, establishes training and professional standards and coordinates research
American Psychiatric Association (APA)	Professional organization of American psychiatrists Coordinates research and sets up standards Works directly with American Medical Association to promote general mental health Especially concerned with improving standards of mental hospitals, clinics, and other agencies
American Social Science Association	Professional organization of American sociologists Carries on preventive measures community health, education, etc
Group for the Advancement of Psychiatry	Organized in 1946, led by Karl and William Menninger to stimulate effective and speedy progress in psychiatry
Association for the Advancement of Psychotherapy	Composed of psychiatrists, psychoanalysts, physicians, and others Sponsors seminars for advanced training and interchange of different viewpoints Publishes a magazine and scientific papers
American Psychoanalytic Association	Composed of analytically trained psychiatrists Engages in research and professional-level discussion groups
American Orthopsychiatric Association	Composed of psychiatrists working especially with problems of children and young people Sponsors seminars and research projects.

Perhaps the two best-known national groups devoted to the promotion of mental health have been The National Committee for Mental Hygiene and The National Mental Health Foundation, which have now merged to form the National Association for Mental Health In the past, the National Committee, founded in 1909 by Clifford Beers, concerned itself with direct attempts to improve mental health, largely by working through other organizations (through surveys, advice to mental hygiene agencies, help to communities in setting up clinics, demonstration projects in schools, production of films and dramatic sketches, giving of awards, dissemination of information through books, pamphlets, lectures, and radio programs, and so on) The National Foundation, on the other hand, founded more recently through the initiative of conscientious objectors who had served as hospital attendants during World War II, worked directly with the public and had as its primary purpose the improvement of conditions in mental hospitals, through public education and through various projects to improve the work of mental hospital attendants (training projects, a monthly magazine for attendants about their work, an annual award for the outstanding attendant) Through the merger of these two organizations their many diverse activities have gained impetus and duplication is being avoided



One of the outstanding examples of a mental hygiene project supported largely by volunteered work and contributions is the famous Lafarge Clinic in Harlem, a primarily Negro section of New York City. The staff, working on a volunteer basis, includes over thirty members—psychiatrists, psychologists, psychoanalysts, psychiatric social workers, speech experts, experts in juvenile delinquency, and secretaries. The clinic is open to all and diagnoses and treats all kinds of nervous and mental disorders. At right, a young patient is being interviewed by Dr. Wertham, psychoanalyst, and a social worker.

The Child Study Association. The Child Study Association was founded in 1888, for parent education. It has a workshop in New York and serves both parents and professional workers in promoting wholesome family life. (1) It runs study groups which offer parents an opportunity to discuss, under professional leadership, normal problems of family life. In group participation, parents gain the understanding and opportunities for personal growth that come through shared experiences. Parents needing individual guidance may make appointments for interviews with psychiatrically trained counselors. The study groups consider child-parent problems from infancy through adolescence. (2) The Association sponsors lectures and conferences on views and findings of specialists; for example, a recent lecture was concerned with "natural-childbirth," which has aroused much controversy in this country, and with the rooming-in plan, by which a baby stays with his mother in the hospital to receive her affection and care. (See page 62.) (3) Speakers are sent over the country to extend the Association's experience to smaller communities. (4) Low-cost literature is distributed to parents and professional men and women, and advisory service and bibliographies are given to parents in other parts of the United States who want to start study groups. Many such study groups are being established.

Other national organizations. The complex of organizations and activities in the mental health field is far too great to permit of adequate discussion here. There are several other professional psychological and psychiatric groups, however, with whose aims and functions the student should be familiar. These are briefly summarized in the chart on the preceding page.

All these professional and other organizations are of the greatest importance in meeting the challenge of mental illness. Without their impetus, without their support, the public would not know *what* action to take, *when, why,* or *how.* Their work is indispensable to research, to government, to states, to educational, parent, and industrial groups working for mental health. They are also of the greatest value in guiding volunteer activities for mental health.

SPECIAL COMMUNITY FACILITIES

To fill specific needs in the community, several types of community clinics, associations, and guidance services have been established. These are often limited to the problems of a particular age group, or to problems arising in connection with a certain type of adjustment—vocational adjustment, marital and general family adjustment, and so on. Only a few of the many local organizations of this type can be mentioned here. In many cities throughout the nation, comparable services are functioning, though the details of their organization and activities vary.

Family living problems. An organization

concerned with family problems is the Association for Family Living, in Chicago, which through several activities aims at helping people to develop satisfying relationships in the family and in the community (1) Group work is carried on by leadership activities in churches, schools, and organizations in the community, by discussion groups conducted directly by the Association, and by consultative work with schools and other groups (2) Direct counseling service is offered in the field of family, marriage, and premarital adjustments, and as a corollary, consultative service is offered for professional persons to give them psychological insights into the problems of their clients. (3) As do many other organizations in the field of mental health, the Association prepares and distributes to individuals and organizations valuable low-cost literature discussing specific problems. It has made special efforts toward eliminating racial and religious discrimination, and toward securing better schools

In its efforts to promote better marital adjustment, for example, the Association for Family Living works along several lines·

a) It sponsors group discussions for engaged and married couples, in which questions like these are discussed

For engaged couples How well do we really know one another? Will qualities that bother me now in my future partner be more, or less, annoying later? To what extent can I expect him (or her) to "grow up" after marriage? How well do we understand the sex relationship?

For married couples What have proved to be sensible ways of handling such matters as the wife's contribution to the family income? Getting along with in-laws? "His friends," "her friends," and "our friends"?

Groups of young couples meet in schools, churches, colleges, settlements, other community agencies, or at Association headquarters. Under staff leadership, they discuss these and other questions of family relationships and preparation for marriage Each series is especially planned to meet the needs of the particular group concerned Other communities may also call upon the Association for Family Living for help in planning family-life education programs

b) In addition to group meetings, the Association staff gives training to community leaders, including ministers, social workers, teachers, nurses, and so forth, who have occasion to deal with marriage problems

c) Individual counseling is carried on by properly qualified counselors at the headquarters, where engaged or married people can come for help with difficulties

d) If personality maladjustments are too great, individuals who come for counseling are referred to other community agencies, such as psychiatrists or clinical psychologists.

Child guidance and parent education. We have discussed the crucial need for parent education, and the fact that such education

Perhaps the greatest potential contribution of guidance clinics and parent education groups lies in helping parents to realize the tremendous influence that their personal relationship with a child has upon his self and environmental evaluations—often far more than the concepts they deliberately try to instill or their conscious attempts at "training" With a parent's obvious enjoyment of his child's company and of activities shared with him, the child can explore his world from a warm, secure vantage point and see it as an interesting, challenging place



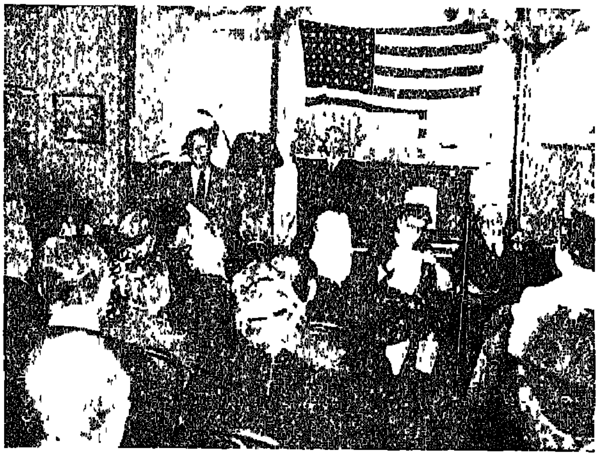


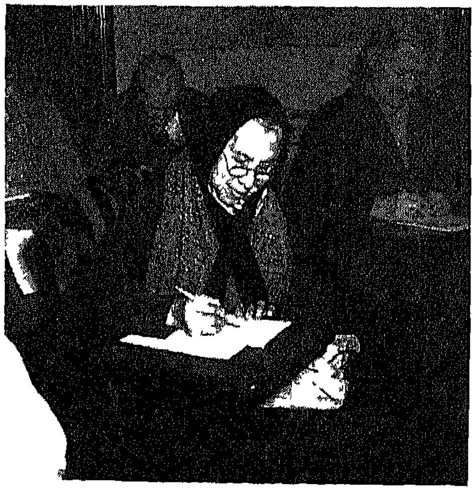


Day Centers for the Aging

The slow deterioration that may come to older people with inactivity, loneliness, and a feeling of uselessness can be to a large extent prevented if, when people begin to age, they can continue to make new friends and develop new skills and interests instead of living in the past These are the keynotes of New York City's Day Centers for the Aging, where from nine to five daily, older people can find a life for themselves in varied activities, each following his own particular bent Social activities (left), classes of many kinds (the woman below is learning to write at 82), and programs put on by members (lower left) help make more meaningful the additional years which science has added to man's life span.

The Centers have found that the older people have unused capacities and resources for emotional expression which develop in a friendly and stimulating atmosphere Often talents that have never been expressed and developed in the workaday years find an enjoyable and therapeutic outlet here Meanwhile illness and invalidism have been noticeably reduced, confirming again the relationship between mind and body that is designated by the term "psychobiological unity" It must be recognized, however, that recreation alone cannot take the place of a useful role in the community, which is what many old people want and can attain if given an opportunity (Levine[25])





involves not only imparting of information, but help in changing attitudes A unique combination of child guidance and parent education has been worked out in four Community Child Guidance Centers in Chicago, sponsored by the Individual Psychology Association and supported by community organizations and interested individuals Because individual counseling is so slow and can reach at best only a small number of those who need it, these clinics conduct their sessions on a group basis, with several mothers and a counselor or psychiatrist discussing child-rearing problems in round-table style, while the children enjoy supervised play and psycho-dramatics in the next room

Sessions last two hours and are free to all comers Two to four cases are discussed at a session Often the child's teacher and other adults concerned attend. The procedure is for the mother to present the problem as she sees it; then she and the teacher or other relatives go out of the room and the child comes in and talks over with the counselor whatever has been suggested in the discussion with the mother or in a previous interview by a social worker. If there are brothers or sisters, they are present too and the counselor talks to them together, for singling out one child is apt to increase existing antagonisms Treating them as a group, on the other hand, lessens mutual hostility and gives the counselor an opportunity to study the relationships and attitudes that may be contributing to the problem

The experience has been that children have discussed their problems freely under these circumstances, so that when the children return to the playroom and the mother comes back in, the counselor, in advising her, is able to give to her as well as to the whole group a much better insight into the factors responsible for the problem Because misbehavior in a child is usually a symptom of faulty relationships between parents and child and between siblings, correction of the misbehavior is almost automatic once the intrafamily relationships are made conducive to healthier attitudes and evaluations of self and surroundings The necessary changes in parental attitude and understanding have often been found to come far more quickly in this group setting than in individual counseling, for each mother quickly gains a new objectivity as she sees her own problems reflected in the others being discussed and realizes that her situation is not unique or something to be ashamed or resentful of, but something that can be analyzed and corrected

Day Centers for the Aging. We have already described briefly the old-age clinic set up by Dr Martin in San Francisco One of the most outstanding programs more recently developed is the system of Day Centers for the Aging in New York City, established since 1943. These centers, when combined with suitable, supervised boarding arrangements, are proving a satisfactory way of relieving strain on institutional facilities, and more important, keeping older people active and interested and well The fundamental principle of the Centers is that senile deterioration occurs "between nine and five"—that is, during the hours of inactivity and loneliness when younger people are about their work Therefore these Day Centers provide older people with opportunities for friendship and recreation during these daytime hours Activities include painting, writing, editing a magazine, writing and performing plays, classwork in English, in poetry, in arts and crafts, and many social activities

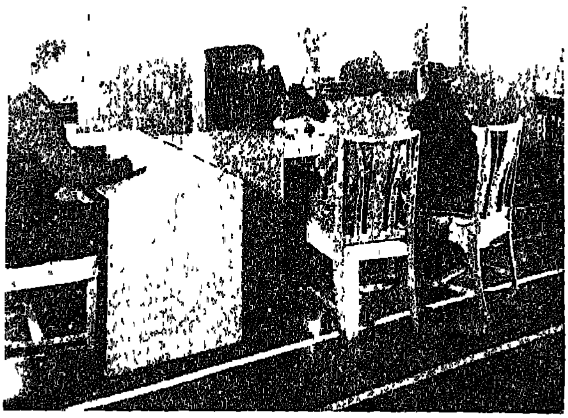
As the New York City Day Center program now stands, it is a useful model to other communities Although "Oldtimers" and "Golden-age" and "Seniors" clubs hold periodic meetings in other communities, this is the only government program which attacks the problem on a city-wide, *daily* basis However, there are many promising indications that similar action is being taken elsewhere by the federal government, by industry, and by local communities In Los Angeles, for example, the City Recreation and Park Department puts out a booklet listing the

city's recreational activities and classes, starring over seventy that are planned especially for older people. And a national committee has recently been set up to survey available services for older people and provide counseling, under the auspices of the National Social Welfare Assembly and with the sponsorship of prominent church and welfare groups, as well as representation from the federal government.

Community problems. A successful combination of infant welfare work, feeding and health measures for children, numerous educational programs, family counseling, employment advising, legal and financial assistance, combatting of racial and religious prejudice, and solving of other local problems has been carried on since 1939, on a community basis, by the Back of the Yards Neighborhood Council of Chicago and more recently, under sponsorship of the Industrial Areas Foundation, by similar neighborhood councils in Los Angeles and South St. Paul, Minnesota. In a slum neighborhood back of the Chicago stockyards, where six or seven nationalities had huddled, each around its own church, bitterly hating and refusing any contact with the others except by way of feuds and persecutions, the Council, composed of about 185 organizations representing some 125,000 people, now practices democratic solving of neighborhood problems. The CIO and the Catholic churches (at least 90 per cent of the people in the area are Catholic) work willingly together in the Council for projects that they realize are for the social betterment of the people, and both admit that they are stronger as a result of this cooperation. Local merchants, too, find that business is better since the racial groups have stopped persecuting each other and begun to trade in each other's stores. The basic theory behind the movement was (1) that delinquency or substandard housing conditions or high infant mortality were all symptoms of the basic social disorganization and could not be meaningfully isolated or successfully treated unless the causes of the disorganization were attacked, and (2) that any such program must be carried out by the local people, not by outside reformers (Alinsky[2]).

One of the measures that most effectively counteracted the former bitter racial enmity was the early successful lobbying for state and federal aid for a hot lunch and free milk program, badly needed because of the widespread malnutrition and the high percentage of working mothers. Children who had been taught to avoid and hate each other now found that refusal to eat together meant no food—and so, for the first time, began to get acquainted.

The work of the Council is almost infinitely varied. Some aspects are unique. For example, there is an active program to combat all rumors that foster racial hatred. Any individual found spreading such a rumor is summoned before the Council and publicly repri-



In the courtroom of today, a psychiatrist, psychologist, or social worker (left) is employed with increasing frequency to give skilled help in the administration of justice. First, he gives the sentencing authority pertinent information on the personality and background of the offender—information that will help determine whether imprisonment, probation, or parole is the appropriate sentence. Second, he helps the offender, whether in prison or out, to reintegrate and reconstruct his behavior patterns. Such help may include medical or psychiatric treatment, economic assistance, vocational counseling. It represents our new emphasis on rehabilitation rather than retribution in law—an emphasis resulting from scientific understanding of the causes of human behavior (Fink[11], Stokes[37]).



Among the leaders in volunteer work for the mentally ill are the "Gray Ladies" of the American Red Cross These women work regularly in our desperately understaffed mental hospitals, helping register patients, entertain, counsel friends and relatives, run library services, and work in the occupational therapy rooms . They have found that their first horror of working with mental patients has changed to a sympathetic understanding of them as human beings in special need of companionship and kindness

manded, his parish priest, the heads of his union, and other groups he belongs to also admonish him In addition, the accuracy of the rumor is checked, if it is found to be untrue, this fact is publicized.

A juvenile delinquent apprehended from this area sits down to talk things over with a committee consisting of the district captain of police, the adult probation officer, the delinquent's school principal, his clergyman, his nationality leader, his parents, and a representative of his father's labor union Together they try to get at the root of the trouble and work out a solution Another unique job of the Council is done through its Credit Union. Money is loaned for only 1 per cent interest, its people may obtain really needed financial assistance but are discouraged from unnecessary borrowing and are counseled instead in better family budgeting.

The community facilities mentioned here represent, of course, only a sample of the many types of activities that are being carried on all over the country. Many communities have cooperative nursery schools, community workshops and recreation centers, and playground programs with instruction in handicrafts and dramatics All these efforts reflect the increasing recognition that skills, interests, good interpersonal relationships, and the satisfaction of basic needs all make for mental health and that adjustment of the individual in modern life is a group responsibility.

VOLUNTEER ACTIVITIES

The mental hygiene movement has always gained a great deal of its strength from volunteer work and funds Since World War II, popular interest in mental health activities has reached unprecedented proportions Magazine articles and books on the inadequacy of our mental hospitals, on the extent and seriousness of mental illness in the United States, and on the need for community action to provide funds and personnel have led to responsive action by an increasing number of community organizations—the Red Cross, women's clubs, men's clubs, civic welfare committees, parent-teacher associations, and so on

Women's groups, for example, are taking increased interest in mental health activities The League of Women Voters studies legislation concerning mental hospitals The National Council of Jewish Women has been conducting an educational program on mental illness The General Federation of Women's Clubs has been carrying on a survey of the incidence of mental illness as a first step toward

Psychiatry in the Nonpsychiatric Professions

In medicine	Rapidly becoming an established part of medical training Increasing psychiatric and psychosomatic orientation of medical men toward organic illness
In nursing	Emphasis on psychiatric aspects of illness in nurses' training Psychiatric orientation in practice helping families adjust to illness, detecting cases needing psychiatric care
In public health work	Psychiatric training of health officers to see emotional aspects of economic and health problems Individual and public education in mental hygiene, especially for mothers and for families with emotional and other problems
In social work	Psychiatric orientation in helping clients to deal with their problems of whatever kind—economic, health, emotional, etc Social workers are active in (1) family case work; (2) child welfare work, (3) court social work (See page 582), (4) medical social work, (5) direct psychiatric social work to implement and reinforce work of psychiatrists, doctors, and other members of psychiatric staff, (6) social group work in connection with community centers, settlements, YWCA, YMCA, Boy and Girl Scouts, etc ; (7) community organization work, coordinating work of welfare agencies in a community, (8) social research
In industry	Provision of psychiatric help for employees by either employing psychiatric teams (as is done by Macy's, General Electric, and Metropolitan Life Insurance Company) or helping employee to get needed help Institution of conditions in plant conducive to satisfaction of employees (1) adequate channels of communication between employees and management, (2) job security and opportunities for advancement commensurate with ability, (3) friendly work relationships; (4) making the worker see the part his job has in the whole picture, (5) effective handling of complaints and frictions Careful testing of employees' abilities and interests and attempts at placement best suited to them
In education	Psychologist or mental hygiene worker on school staff helps children, teachers, and parents, individually and in relationships with each other (See page 576). Adjustment of school curriculum at all levels to meet emotional, social, intellectual, and physical needs, special courses in personal and social problems (See page 565) Cooperation with other community agencies to help youth.

In the chuiches	Training courses in psychiatric principles for clergy Psychiatric orientation in counseling Sponsorship of classes in mental health, child training, personality growth, etc , as well as traditional religious education and guidance.
In law	Campaigning against traditional punitive attitude toward lawbreakers, new attitudes toward criminals as people who need help being fostered among lawmakers, penal administrators, and the general public (See pages 400-401 and 582) Diiect work with criminals in retraining and rehabilitation, occasionally with the aid of extensive psychotherapy

See the following sources for a more intensive study of the role of psychiatry in public health work, Bobbitt[6], Lemkau[23,24], MacDonald[30], Schumacher[38], and Zimmerman[42], in the ministry, Felix[12], Peale and Blanton[33], Kemp[21], in industry, Rennie *et al* [34], Dunbar[10]

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stimulating local concern about mental health problems These and other community organizations have taken the initiative in promoting the establishment of mental hygiene clinics The range of community organizations taking an interest is illustrated by the list of organizations represented on the advisory board of the Prince Georges County pilot clinic (See page 576) · Community Chest and Planning Council, county health department, county schools, county courts, parent-teachers associations, the county medical society, the local university, a Negro community, Catholic churches, the County Ministerial Association, the Federation of Women's Clubs, Rotary, Lions, and others.

PSYCHIATRY IN THE NONPSYCHIATRIC PROFESSIONS

Psychiatric principles of mental hygiene are gradually coming to be known and applied in many areas of modern life, in the same way that principles of physical hygiene once spread Modern sanitation procedures began with the discovery of germs in the laboratory, then spread to the hospital, later, through pressure from scientific and medical men, they were incorporated into legal requirements for sewage disposal, food handling, etc At the same time, principles of hygiene were publicly expounded in schools, doctors' offices, factories, offices, newspapers, and magazines. Now every school child knows the elementary principles of cleanliness and practices them routinely in countless everyday situations Today, in like manner, psychiatric principles and information are in the stage of progressing from the clinic and laboratory to the public, via medicine, nursing, public health, social work, the ministry, the schools, industry, and the law The chart on these pages gives only the briefest summary of the role psychiatry is already playing in these varied fields

INTERNATIONAL MEASURES FOR MENTAL HEALTH

Mental health is the Number 1 problem not only in the United States, as the President of the United Nations General Assembly recently asserted, but also of the entire world Indeed the unfavorable conditions in this country are magnified throughout most of the world The incidence of psychological disorders in the world has not been estimated at all accurately, but it is known to be tremendous The need for treatment facilities is correspondingly great Whereas the 150,000,000 people in the United States have a total—quite insufficient—of 5,000 psychiatrists and 700,000 psychiatric beds, the 350,-

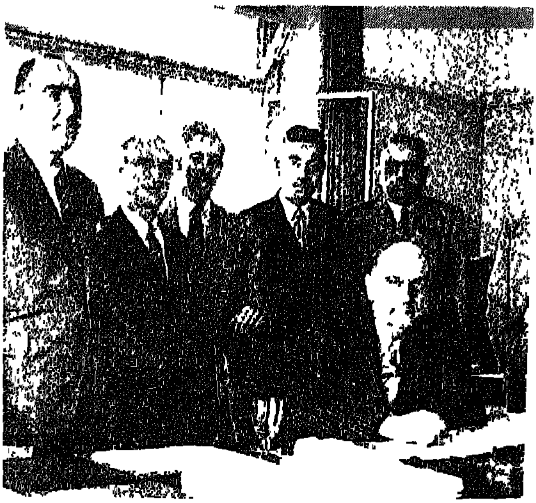
000,000 of India have only perhaps 80 psychiatrists and 20,000 beds, and other underdeveloped countries also show inadequate ratios In China there are less than 50 psychiatrists and about 6,000 psychiatric hospital beds for a population of 450,000,000 people (Bowman[7]) There are similar deficiencies in the number of clinical psychiatrists, psychiatric social workers, nurses, and other members of the psychiatric team

The question has arisen as to whether we or any other advanced industrialized nation can achieve mental health in isolation from the rest of the world, however great our efforts. Can one nation save itself while others remain stagnant, a prey to famines, plagues, and the frustrations and evils attendant on such conditions? The answer—becoming increasingly obvious to all of us—is *No* Today we realize that mental illnesses, wars, international tensions and conflicts, and similar troubles are interrelated, and what happens in the rest of the world affects us also, directly and indirectly

We have learned from our terrible experiences of the last two wars that a sane and peaceable attitude toward others does not prevent war, does not save us from the holocaust Humanitarianism does not preclude deadly hostility and aggression on the part of others. Nor can we free ourselves from socially rooted anxieties as long as we are forced to devise ever more powerful armaments and explosives against the imminent threat of war For not only do such preparations directly breed anxiety over the future in the minds of all of us, but they also absorb vast funds and labor efforts which otherwise could be turned to educational, recreational, and other more profitable pursuits

Just as our own mental health activities are retarded and made less effective by world-wide tensions, so too, conversely, every measure undertaken on an international scale to cure or prevent mental illnesses contributes in turn to our own national programs The international outlook—in contrast to the isolationist—thus expands our field of operations We must not slacken our efforts within this country, but at the same time we will find it increasingly essential to participate—even take the lead—in international campaigns

It was this attitude, in general, which brought about the new international organizations at the end of the war—the United Nations, and more especially, its allied organizations concerned immediately with mental health, the World Health Organization and UNESCO (the United Nations Educational, Scientific, and Cultural Organization), as well as the World Federation for Mental Health



The first meeting of the Expert Committee on Mental Health of the World Health Organization, September 1949 Mental illness as a world problem runs so deep to the roots of every culture that many decades of social study and action will be required to work out effective long-term programs At this meeting, a historic beginning was made in defining the problem and outlining the general form that long-run action should take Shortages of psychiatric personnel and facilities, serious in the United States, are far greater in most other countries Sitting Dr William C Menninger, United States member, elected chairman of the meeting Standing (left to right) Dr Antonio Pacheco e Silva, Brazil, Dr Josef Hadlik, Czechoslovakia, Dr G Hargreaves, WHO, Dr Leslie Ch'Eng, China, Dr M V Govindaswamy, India (co-opted member), Dr T Ferguson Roger, Scotland

THE WORLD HEALTH ORGANIZATION (WHO)

It is the general function of the World Health Organization to formulate recommendations to be carried out by member states of the United Nations Brock Chisholm[5], Director-General of WHO, stated· "The desperate need of the human race at this most precarious stage of its development is for understanding of man and for the development of methods by which he can learn to live in peace with his kind" (p. 543) Through the international efforts of WHO, and more particularly, its "Expert Committee on Mental Health" (and UNESCO can be included as well) the individual, organizational, and governmental activities to develop such understanding and methods can be planned, coordinated, and in some cases directed

The Expert Committee on Mental Health of WHO had its first meeting in 1949 to formulate and agree upon principles and priorities in mental health work In view of the tremendous needs and the present shortage of psychiatric personnel and facilities throughout the world, the Committee considered that it will be impossible to provide therapeutic facilities for all the needy peoples of the world, within the foreseeable future We must turn, then, to preventive measures for the ultimate solution of the problem of mental illness The Committee lays great emphasis on the incorporation into public health work—already widely established throughout the world—of responsibility for promoting the mental health of the community as well as its physical health

Other salient recommendations, among the many made, refer to (1) extensive educational programs, including psychiatric teaching, psychiatric orientation in medical training, public mental hygiene courses, training of nurses in mental hygiene measures, fellowships, education of the public, and research, and (2) the fostering of psychiatric orientation to the treatment of juvenile delinquents and criminals both before and after prison terms, to be carried out by the WHO in cooperation with the UN Study on the Prevention of Crime (WHO[38]).

UNESCO

The UNESCO Project on International Tensions is probably the most elaborate international undertaking involving psychiatric perspectives and aiming at better mental health The Project is under the Social Sciences Department of UNESCO, directed by Robert C Angell, the Acting Department Head The project was outlined, and specific tasks assigned to cooperating personnel at two general conferences, at Mexico City in 1947 and at Beirut in 1948 Much of the work is still in progress, but some is already completed Two books embracing extensive findings have been prepared One, entitled *National Aggression and International Understanding,* contains contributions by eight social scientists edited by Prof Hadley Cantril The other, by Dr Otto Klineberg, former head of the Tensions Project, is *Tensions Affecting International Understanding—A Survey of Research*

The major efforts of the Tensions Project are focused on the problem of war Social studies are made on factors contributing directly toward the development of war; and general studies are made on national attitudes, ways of life, and other overall sociological aspects (Klineberg[22]) Only a few of its multitudinous projects can be mentioned here

1 A series of monographs on differences in national cultures or "characters" including sociological descriptions, life histories, Rorschach responses, and other psychological data concerning individual members of the societies studied, and with an attempt to synthesize existing information
2 Studies of national "stereotypes" or ready-made conceptions of nationals of different countries
3 Studies of attitude formation and change, particularly with regard to international prejudice, attempts to combat prejudice

by exchange fellowships, visiting professorships, elimination of hostility-inducing material from textbooks, etc.

4 Research concerning the forces making for aggressive nationalism

5 Studies of the relationship between population problems and international understanding

6. Investigation of the influence of modern technology on attitudes and relationships between people, changes in ways of living, and so on

The best conclusion to such a brief discussion of the multifarious activities of WHO, UNESCO, and the participating countries and personnel, is the warning given by Dr Klineberg[22]

"Our goal is, of course, research leading to action There is a real and obvious danger in action which is premature There is an equal danger in delaying action until it is too late Our major difficulty lies in steering the proper course somewhere in between." (p 10)

This realistic appraisal of the difficulties and dangers should prevent any repetition of the quick but ineffective "reforms" which the peoples of the world have too often been duped into adopting.

THE WORLD FEDERATION FOR MENTAL HEALTH

In 1948 an International Congress on Mental Health was held in London, under the auspices of the International Committee for Mental Hygiene (an international counterpart of our National Committee for Mental Hygiene) and the British Association for Mental Health At this Congress the World Federation for Mental Health was set up The Federation is a group of nongovernmental organizations concerned with mental health, and at present groups from thirty-three different countries hold memberships This is an important step toward the coordination of nongovernmental activities. The Federation has been admitted to consultative status by WHO and UNESCO, so that the work of the United Nations for mental health can receive the benefit of work carried out by private organizations both nationally and internationally

In this chapter we have tried to outline the aims and principles that must be used as a blueprint for successful preventive measures, and have seen something of the veritable maze of local, national, and international measures which have already been undertaken It is the first time in history that the social problem of mental health has been so attacked—as a phenomenon subject to discoverable natural laws, and hence, potentially at least, within our control. Our final task in the present volume will be to "take our bearings," in an attempt to clarify the present and potential role of psychology and psychiatry in modern life and appraise the trends in the field today.

REFERENCES

The reference list includes not only the sources from which the author has drawn material, but acknowledgments of the permissions granted by authors and publishers to quote directly from their works

1 Adlerblum, Evelyn D "Mental Hygiene Begins at School" *Mental Hygiene*, XXXI(1947), 541-555

2. Alinsky, Saul D "Youth and Morale" *American Journal of Orthopsychiatry*, XII(1942), 598-609

3 Bateson, G and Mead, M. *Balinese Character*, New York New York Academy of Sciences, 1942

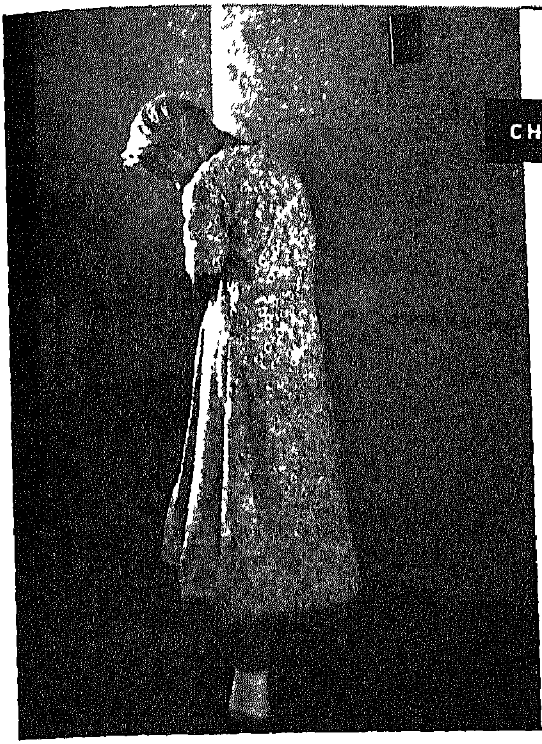
4 Benedict, Ruth *The Chrysanthemum and the Sword* New York Houghton Mifflin, 1947.

5 Benedict, Ruth *Patterns of Culture* Boston Houghton Mifflin, 1934

6 Bobbitt, Joseph M "Counseling and Psychotherapy in Public Mental Health Work." National Institute of Mental Health, Federal Security Agency, Washington, D C

7. Bowman, Karl M "Psychiatry in China" *Digest of Neurology and Psychiatry Series*, XVI (1948), 328 335
8. Chisholm, Brock "The Future of Psychiatry" *American Journal of Psychiatry*, CIV(1948), 543
9. DuBois, C *The People of Alor* Minneapolis University of Minnesota Press, 1944
10. Dunbar, Flanders *Mind and Body Psychosomatic Medicine* Toronto, Random House, 1947.
11. Dunham, H W "Current Status of Ecological Research in Mental Disorder" *Social Forces*, March 1947.
12. Felix, Robert H (Chief, Division of Mental Hygiene, U S Public Health Service) Speech presented before the Mental Hygiene Society of Monroe County, Rochester, New York, March 23, 1949 Distributed by the National Institute of Mental Health, Federal Security Agency, Washington 25, D C
13 Felix, Robert H and Bowers, R. V "Mental Hygiene and Socio-Environmental Factors" *Milbank Memorial Fund Quarterly*, XXVI (1948), 125 147. This authoritative article, by the Medical Director and Chief and Social Science Research Consultant, respectively, of the Mental Hygiene Division, U S Public Health Service, has been drawn on heavily throughout the preparation of the section on sociological preventive measures It contains a full summary of activities in this field, with bibliographical references
14 Fink, Arthur E *The Field of Social Work* New York Henry Holt, 1949
15 Fortune, R F *Sorcerers of Dobu.* London Routledge, 1932
16 Frank, Lawrence "The Reorientation of Education to the Promotion of Mental Hygiene" *Mental Hygiene* XXIII(1939), 529 543
17 Fromm, Erich *Escape from Freedom* New York Farrar and Rinehart, 1941
18 Gorer, Geoffrey. *The American People A Study in Character* New York Norton, 1948.
19 Kardiner, Abraham *The Individual and His Society* New York. Columbia University Press, 1939
20 Kardiner, Abraham *Psychological Frontiers of Society.* New York Columbia University Press, 1945
21 Kemp, Charles (Pastor, First Christian Church, Red Oak, Iowa) "The Minister and Mental Hygiene His Opportunity and Responsibility" Distributed by the National Committee on Mental Hygiene, and reprinted from *Mental Hygiene*, XXXII(1948), 72-79.
22 Klineberg, Otto "The UNESCO Project on International Tensions A Challenge to the Sciences of Man" *International Social Science Bulletin*, UNESCO, I(1949), Paris, No 1-2
23 Lemkau, Paul V. "Mental Hygiene in Public Health" Reprint No 2800 from the *Public Health Reports*, LXII(1947), 1151-1162
24 Lemkau, Paul V "What Can the Public Health Nurse Do in Mental Hygiene?" Distributed by the National Institute of Mental Health, Federal Security Agency, Washington 25, D C
25 Levine, Harry (Administrator of Special Services for the Aged and Community Services Section, Division of Field Operations and Services, Department of Welfare New York City) "Recreation and Services for the Aged" A speech presented at the National Conference of Social Work, Atlantic City, New Jersey, April 22, 1948
26 Liebman, Joshua Loth *Peace of Mind.* New York Simon and Schuster, 1948
27 Linton, Ralph *The Cultural Background of Personality* New York Appleton-Century, 1945
28 Lynd, Robert and Lynd, Helen *Middletown* New York Harcourt, Brace, 1929
29 Lynd, Robert and Lynd, Helen *Middletown in Transition* New York Harcourt, Brace, 1937
30 MacDonald, Martha W "Mental Hygiene in the Child-Health Conference" *The Child*, IX(1944), August, 27-30
31 Menninger, W C "Psychiatric Experience in the War, 1941-1946" *American Journal of Psychiatry*, CIII(1947), 577-586
32 Myrdal, Gunnar, *et al The American Dilemma* New York Harper, 1948 (On the Negro problem)
33 Peale, Norman V and Blanton, Smiley *The Art of Real Happiness* New York Prentice-Hall, 1950
34 Rennie, T A C, Swackhamer, Gladys, Woodward, Luther E "Toward Industrial Mental Health An Historical Review" *Mental Hygiene*, XXXI(1947), 66-88
35 Ross, Mabel "Pilot Mental Health Clinic First Annual Report of Prince Georges County Clinic" Federal Security Agency, *Public Health Reports*, LXIV(1949), 797 801
36. Schumacher, Henry C (Medical Director, U S Public Health Service, District No 5, San Francisco) "The Integration of Mental Hygiene Concepts and Practices in a Public Health Program" Reprinted from the *Canadian Journal of Public Health*, September 1948 Available from the National Institute of

Mental Health, Federal Security Agency, Washington 25, D C
37 Stokes, Warrington "Social Worker Plays Part in Court Process" *The Child*, December 1947
38 United Nations, World Health Organization *Report on the First Session of the Expert Committee on Mental Health* (29 August-2 September 1949, at Geneva), p 39 William C Menninger was chairman at this session.
39 Veblen, Thorstein *The Theory of the Leisure Class* New York Viking, 1931
40 Warner, W Lloyd *Yankee City Series* New Haven Yale University Press, 1941 ff
41 Whitman, Samuel "Stop Sniping at Parents" *The Child*, May 1947
42 Zimmerman, Kent A "Mental Health Services in the Health-Department Program" *The Child*, September 1946, p 50 ff



CHAPTER FIFTEEN

PSYCHIATRY IN THE MODERN WORLD

The Present Role of Psychiatry
Psychiatry and Social Ills
The Individual's Contribution

In a mid-century speech, January of 1950, the President of the United Nations General Assembly, Gen Carlos P Romulo, asked what would happen "if it were announced that mankind had suddenly been confronted with a scourge which would fill every second hospital bed in the United States with its victims, definitely require the future hospitalization of one out of every ten babies born today, necessitate some form of medical treatment for as many as one person in five in this country [the United States] alone, affect the lives of practically every family in the world, and require the building of special communities where five, six, and seven thousand victims would have to live separated from their families .

"You can imagine," he continued, "the headlines that would herald such a disaster, the editorials that would condemn the menace and demand preventive measures, the clamor of people all over the world calling upon the statesmen and scientists to do something to avert the calamity Parliaments would convene and citizens everywhere would gather to demand immediate action without regard for the cost " He then added that this was not "mere fantasy" but "an already existing reality "

In the preceding chapters we have assessed the extent and dimensions of this tremendous problem of abnormal behavior in modern life and have examined the armaments that have gradually been built up to combat it We have discussed the development of our modern views of abnormal behavior and have seen that at long last mental disorders and social pathology have been generally recognized as phenomena which follow natural laws and are therefore subject to scientific investigation and control In the light of available scientific evidence we have briefly outlined what appear to be the essential dynamics of personality adjustment and have reviewed the psychoneuroses, the psychoses, and other personality

disorders We have briefly indicated the theories and methods of modern diagnosis and treatment and some of the measures which appear relevant to prevention In the course of our discussion we have tried to clarify and emphasize those fundamental points of agreement which underlie the total area of modern psychiatry.

THE PRESENT ROLE OF PSYCHIATRY

In concluding our discussion of abnormal behavior, there are certain summary points relating to the present status of modern psychiatry and its future potentialities which are of interest to us all Despite the progress that psychiatry has achieved in the last fifty years in the diagnosis, understanding, treatment, and prevention of mental illness, many deplorable conditions still exist and the advances have been far from uniform over the country as a whole Today there are tremendous differences in the extent to which psychiatric principles are applied by those who deal with the mentally disturbed

MENTAL HOSPITALS TODAY

It will be amply apparent, then, that there is a very large gap between the actual role of psychiatry in our society and the role that it could play with full utilization of present psychiatric knowledge Perhaps nowhere is the discrepancy more strikingly shown than in the almost unbelievable range of different conditions, approaches, and types of care afforded to patients in the country's mental hospitals and clinics Some mental hospitals are organized to utilize the latest psychiatric knowledge and therapy and plan every item of their daily routine to contribute to their patients' improvement. Others have changed little in the past fifty years and continue to operate principally in terms of custodial care, often with appalling filth, overcrowded wards, idleness for their inmates, and other conditions more likely to aggravate mental disorders than to cure them. The pictures on pages 594-595 show some of these deplorable conditions In contrast, the pictures on pages 596-597 show what can be accomplished and is being accomplished in many institutions, on the basis of present psychiatric knowledge. As further research increases our knowledge and as funds become available, we will be able to do even more.

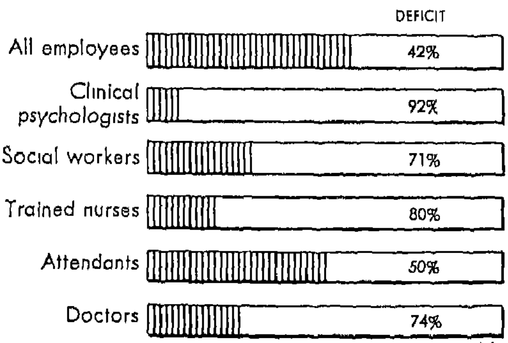
GENERAL LIMITATIONS IN THE ROLE OF PSYCHIATRY TODAY

The entire field of psychiatry is seriously handicapped today by shortages in personnel, facilities and equipment, and funds for research.

Personnel limitations. At the present time there are only some 5000 psychiatrists in the United States whereas "it is conservatively estimated that the country needs between 10,000 and 15,000 well-trained psychiatrists" (Menninger[1]) In differing degrees, the same shortages are reflected in the number of clinical psychologists, psychiatric nurses, social workers, and other specialized personnel

Unfortunately the state mental hospitals are perhaps the hardest hit by this shortage. Not one state hospital meets the minimum personnel standards established by the American Psychiatric Association The charts below and at the top of the next page summa-

DEFICITS IN STATE HOSPITAL EMPLOYEES



From statistics compiled for the National Committee for Mental Hygiene

MINIMUM STANDARDS AND ACTUAL PERSONNEL-PATIENT RATIOS IN STATE HOSPITALS

Ratio to Patients	American Psychiatric Association Standards	Actual Situation
Psychiatrists	1 per 30 to 200	1 per 250 to 500
Nurses	1 per 4 to 40	1 per 176
Attendants	1 per 6 to 8	1 per 12 to 30

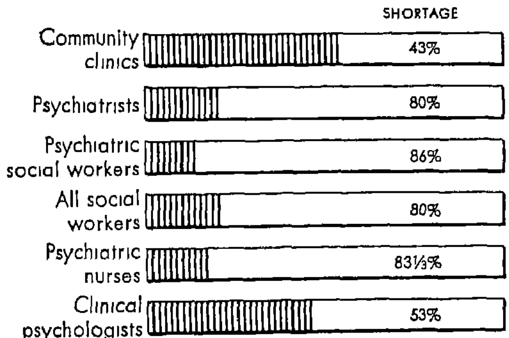
Figures from the Group for the Advancement of Psychiatry[2]

ize the extreme personnel deficits in state hospitals as a group. These are average figures. In some places there is only one psychiatrist for every 1000 patients, one attendant for every 450 patients. In addition, there is a high rate of turnover among trained personnel in many state hospitals because of lack of opportunity for advancement, low pay rates, and the limited opportunities for either research or really adequate treatment.

Shortage of hospitals, clinics, and other treatment facilities. There are a number of private mental clinics which are well staffed and equipped to offer the best available therapy, but these clinics must of necessity charge large fees, and their services are restricted to a relatively small number of patients. Only about 4 per cent of the mentally ill are treated in private institutions.* Many of our Veterans Administration hospitals and clinics, although handicapped by inadequate funds and personnel, are pioneering in new ways of providing their patients with the best possible psychiatric attention. (See page 596.) In addition, there are a limited number of clinics which are partially financed by the state or charitable institutions, as well as the many psychiatrists and clinical psychologists in private practice to whom troubled individuals may go for consultation. But the great majority of patients, who must turn to the state hospitals for help, find facilities that are totally inadequate to meet the need, largely due to insufficient funds. And for individuals who have committed criminal offenses, no therapy is usually available, though, as we saw in Chapter 9, the great majority of convicted criminals are suffering from character disorders, neuroses, or other conditions that psychotherapy could alleviate, whereas mere confinement accomplishes little or nothing. Thus, the overall picture is one of woefully inadequate facilities for the treatment of abnormal behavior.

At the present time there is a great need for additional mental hospitals and the expansion and modernization of existing ones, even though in the long run our hope is to reduce the number of persons requiring hospitalization through early detection and correction of unhealthy personality trends and the amelioration of social conditions conducive to psychopathology. Unfortunately, progress in the expansion and improvement of state hospitals has been slow.

OVERALL SHORTAGES OF PSYCHIATRIC PERSONNEL IN POPULATION AS A WHOLE



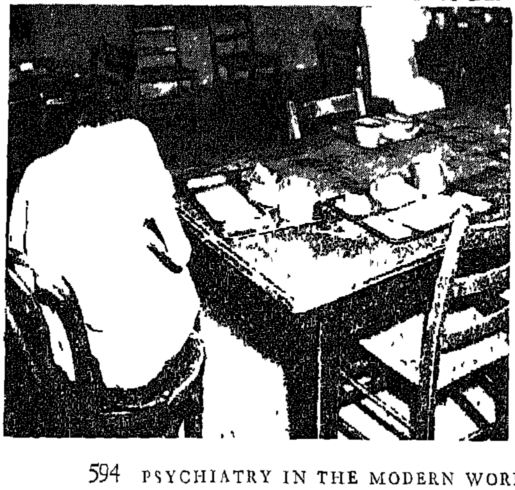
From statistics compiled for the National Committee for Mental Hygiene

*Another 9 per cent of those receiving aid do so through federal facilities; the remaining 87 per cent are dependent upon state hospitals.









Many of our state mental hospitals suffer from seriously inadequate treatment facilities, miserable living conditions, and overcrowding. Some are better in some respects than others, but not one meets minimum requirements as established by the American Psychiatric Association. The pictures on this and the opposite page were taken at mental hospitals in different parts of the country. For example, above left is the hydrotherapy room at one hospital—unused for years because of lack of personnel to man it, and now converted into an occupational therapy room. Personnel was so short at this hospital that many patients had not seen a doctor for as long as five years. In another hospital, there was no occupational therapy, no provision for supervised recreation (above). Here 400 patients of all kinds, mixed indiscriminately, stood or sat in a barnlike dayroom intended for only 80, with few benches and nothing to do from one dreary day to the next.

Living conditions in many state hospitals reach the point shown middle left, where the ward toilet must serve as a pantry and dishwashing stand; the disease danger here is obvious. In this same hospital, bottom left, patients were given less than five minutes to gulp down cold food which had little more flavor or nutrition than dishwater.

The range of sleeping conditions in our state mental hospitals is shown opposite: in some there are filth, vermin, no sheets and sometimes no blankets (top); others maintain cleanliness but must put pallets on the floor (middle), or crowd beds so close together (bottom) that no privacy is possible and little individual care. But though conditions in state hospitals are appalling, Menninger[1] *points out that in most states a fourth of the total budget is spent for the care of mental patients. He estimates that about four or five times the present amount is needed, an almost impossible goal. Thus the crucial importance of successful preventive measures becomes increasingly apparent.*



Coupled with the inadequate operating funds is the fact that the rapid increase in the mental hospital population has far outdistanced available hospital facilities, resulting in serious overcrowding and its attendant evils. Since state mental hospitals must admit all cases committed to them, new patients must often occupy hallways, attics, cellars, and rooms designed for recreation and other purposes. Were the results of overcrowding confined to crowded sleeping conditions, it could perhaps be tolerated, but unfortunately it influences other phases of hospital care and treatment. Many patients who would not otherwise need it have to be kept under mechanical restraint, particularly at night. In one state hospital a quarter of the patients were restrained at night by thongs or handcuffs, although hardly one in a thousand requires it in a well-run hospital (Deutsch[1]). Inmates eat meals that cost an average of 22 cents a day, while patients in general hopitals eat at the rate of 75 cents to $1.50 per day (Menninger[3]). Criminals in state prisons are often better fed than patients in state mental hospitals.

Finally, the tragic results of a lack of adequate personnel, equipment, and funds are often reflected in an almost complete lack of treatment facilities. In one state mental hospital described by Deutsch[1]:

"Only a few patients were under electric shock treatment in an institution with a population of 6100, a great many more could have benefited by such treatment. No insulin shock therapy was being used because . . . there wasn't sufficient personnel to administer it. Only a few score patients were given occupational therapy; at least 4000 should have had this beneficial work. The rest were consigned to deteriorating idleness." (pp. 42-43)

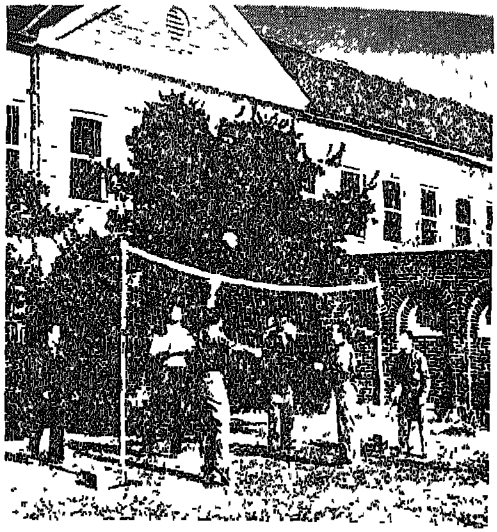
It will be obvious that psychotherapy in any adequate sense is also impossible in the light of conditions existing in these institutions, even though it is usually an essential part of any effective treatment program, particu-

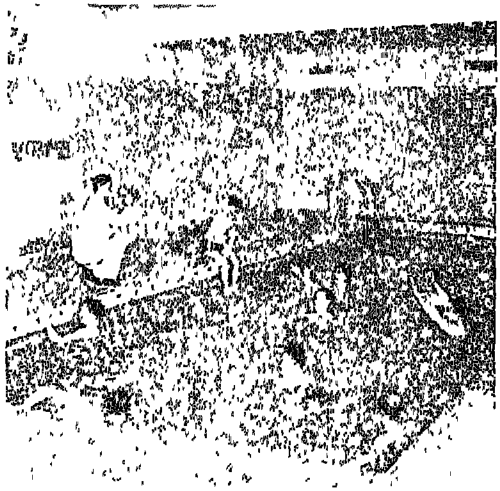
larly in terms of the long-range adjustment of the patient. In addition, of course, recreational therapy, social-worker follow-ups, and the many other important phases of a well-rounded treatment program inevitably are practically nonexistent. The result is that many mental patients who could be helped to make an adequate adjustment in the community become hopeless hospital cases and a prolonged burden upon the taxpayer.

Lack of adequate research. Psychiatric research today is very inadequately financed, in relation to the large numbers of mentally ill people in our society and the magnitude of the knowledge still needed for effective treatment and prevention. The chart on page 599 offers some striking comparisons.

The lack of adequate research has severely handicapped psychiatry in its attempts to gain greater understanding of psychopathology. For example, we really know very little yet about the development of schizophrenia, and this gap in our knowledge is conducive to all sorts of theoretical speculation and verbal controversies which, however stimulating, will be of questionable value until the hypotheses are subjected to experimental verification or negation. Similarly, psychological diagnostic and treatment procedures have still to be adequately assessed in terms of their most effective uses. As a result, there are wide differences of opinion about a number of unsolved issues in these areas—how much time should be taken from potential therapy hours to administer diagnostic tests, what types of treatment are best for different specific disorders, how psychotherapy is related to learning; what actually happens to the patient's psychological processes during the course of successful therapy, and many other questions. Until adequate and coordinated research supplies us with needed evaluations of concepts and techniques, the full potentialities of modern psychiatry cannot, of course, be achieved.

Despite all these inadequacies and the gap in many places between present knowledge and general application, modern psychiatry







The Modern Mental Hospital

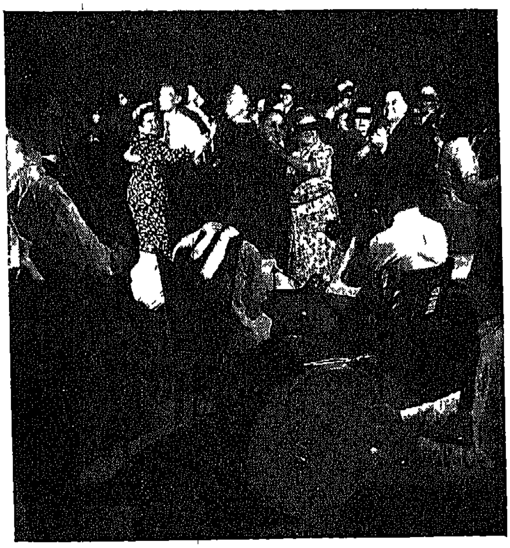
The modern mental hospital provides a friendly, encouraging, understanding atmosphere with a regimen of activities directed toward the achievement of maximum physical and mental health In the Veterans Administration psychiatric hospital shown on the opposite page, there is no time for idleness, and each day brings opportunities for interesting and stimulating activities in attractive surroundings Through physical activity there is a release of emotional tensions, and in the swimming pool the therapeutic effects of hydrotherapy are combined with recreation Curtains at the windows, comfortable chairs, varied reading matter brought to the wards, all help to encourage a return to normality

In a modern mental hospital therapy is adapted to the individual need Excited patients may receive sedatives and hydrotherapy Depressed patients may be scheduled for electro-shock, schizophrenics for insulin shock, and so on The therapeutic regimen for a given patient will begin with scheduling of his activities from the time he arises in the morning until he goes to bed again at night Patients are encouraged to be interested in their own progress and development and to help themselves toward recovery

The patient usually sees his individual therapist (who may be a psychiatrist or a psychologist) one hour a day, five days a week In addition, he may be in group therapy with other patients for about one and a half hours two times a week Occupational therapy, music, and courses giving high school or college credits may be provided Team activities such as basketball and softball are encouraged (upper left), often inmates see the latest motion pictures Every effort is made to provide a total life situation that will build interests and skills and healthful attitudes capable of withstanding the stresses of modern life

If funds, staff, and equipment are adequate, there is much that a hospital can do to satisfy important needs of its patients and create an atmosphere of friendliness and constructive activity In the Milwaukee County Asylum, pictures of which appear on this page, restraints have been virtually abolished, regular free beauty treatments are provided, there are a weekly dance, bingo games, song fests, and numerous athletic activities Attendants are trained to treat their charges like human beings and to express interest in their activities In 1949 one of its attendants, Roland Brand (shown in white coat in view lower right) won the annual prize given by the National Mental Health Foundation to the country's best psychiatric aid

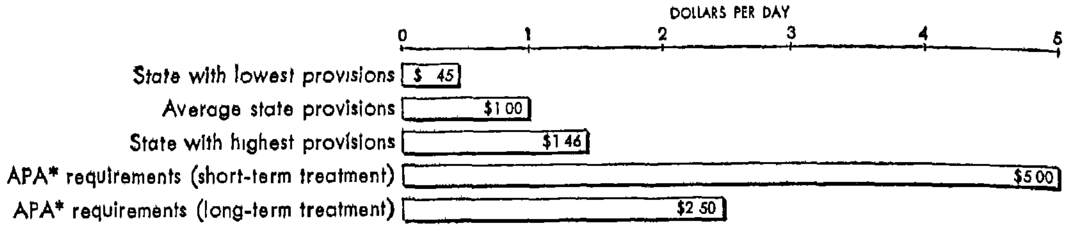






Photos © LOOK Magazine

AVERAGE COST OF STATE HOSPITAL MAINTENANCE



*American Psychiatric Association

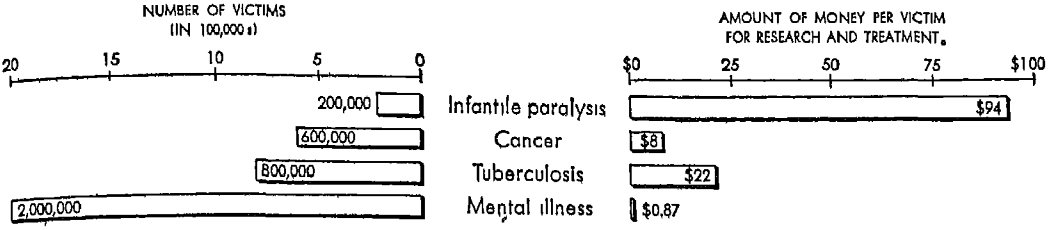
Bureau of the Census, 1944, Patients in Mental Institutions, p 84

has made tremendous progress. In Chapter 14 we saw some of the efforts that have been made toward mental hygiene and the increase in our clinical facilities for both prevention and treatment that has been brought about through the cooperation of governmental and private organizations. Shameful conditions in state mental hospitals have been brought to the attention of the general public, and in most states corrective measures are being undertaken Programs are being sponsored under the National Mental Health Act and by the Veterans Administration for the training of badly needed psychiatrists, clinical psychologists, and related personnel. Though funds and opportunities for research to evaluate our dynamic concepts experimentally remain pathetically short of what they should be, they are far greater than at any time in the past and are steadily increasing. As the findings from research studies pour into the field via journal articles and textbooks, it has become necessary to modify constantly our existing body of knowledge and our current theory We are acquiring a habitually evaluative and critical attitude toward psychiatric data and procedures—an extremely healthy attitude for the advancement of scientific psychiatric theory and practice At the same time, the general public has become aware of the value of psychological help when one's problems become overwhelming or when one's life seems futile and unsatisfactory. This is resulting in an increasing use by the public of our general psychiatric facilities outside mental hospitals and the support of the public in expanding clinics and other psychiatric agencies for both treatment and prevention

PSYCHIATRY AND SOCIAL ILLS

The progress made in the field of psychiatry through coordinated efforts of psychiatrists, clinical psychologists, social workers, anthropologists, and other professional personnel has not been easily attained. Only in the last few years has psychiatry been begrudgingly accepted by the medical profession as a whole, and clinical psychologists have received little if any better treatment among either psychiatrists or fellow-psychologists. However, as the knowledge gained from the study and treatment of the mentally ill has proved itself of value both in maintaining the effectiveness of combat troops and in diverse areas of civilian life—education, social work, criminology, industry, mental hygiene, psychosomatic ailments—psychiatry has won its professional status, and today there is considerable speculation as to the possible role it may play in the alleviation of social ills. Can psychiatric knowledge be of value in the eradication of racial intolerance? Can it help in setting up worth-while social goals which are compatible with the potentialities and dynamics of human behavior, and which will thus lead to a maximum of both social progress and individual human happiness? Can it help in maintaining our democratic way of life and preventing the occurrence of a devastating global war? In the same way that physical

COMPARATIVE RESEARCH FOR FOUR MAJOR ILLNESSES



Statistics from Menninger Facts and Statistics[1]

medicine has raised the general health standards of the nation, can psychiatry promote general mental hygiene and, in coordination with other social sciences, the government, and the general public, effect certain social changes which will prevent widespread personal maladjustment and increase happiness and satisfaction?

These are, of course, difficult and controversial questions to answer. Many clinicians frown upon such an approach, insisting that psychiatry is concerned only with the understanding and treatment of mentally ill individuals and not with the problems of social progress. It is difficult to see, however, how physical medicine could have progressed to its present level of efficiency if it had concerned itself only with the diagnosis and treatment of individual sick people and not with prevention, requiring public education and social measures. Thus, many men in the field of psychiatry today would agree with William Menninger in his conviction that psychiatry *can* undertake preventive measures that will contribute to the alleviation of the world's ills.

Like other knowledge, psychiatric knowledge can be used for good or evil. At the present time we live in a paradoxical world where scientific advances have actually endangered our very existence. The modern age has produced the most incredible developments in the physical sciences—television, rocket power, the harnessing of atomic energy, mechanical brains, and countless other wonders—but unfortunately, these tremendous advances in the physical sciences have not been matched by equal progress in the social sciences, and this lag may well prove fatal to modern man, for the scientific advances have been directed toward the construction of the most lethal weapons of mass destruction ever conceived and contain the potentialities for destroying our very planet. Psychiatric understanding has been used by the totalitarian states to contrive submission in their people by methods more subtle than force.

But if we may assume that it is the task of the social sciences to attempt to overcome the scientific lag and to assist more effectively in the solution of the various social ills and problems of mankind, then modern psychiatry can, potentially at least, play a very important role. For as we direct our scientific endeavor toward the understanding of individual and group behavior—in terms of man's needs, potentialities, development, motivations, and adjustive reactions to stress—there seems every reason to believe that it will be possible to provide the essential scientific data about man that could serve as a basis for solving our social problems in a rational and scientific way, rather than in the chaos and destruction of global war. As research shows us which attitudes and activities are effective, productive, and satisfying emotionally and which ones lead to conflict and unhappiness, such knowledge, scientifically based and tested, will be incorporated into the very structure of society—the fabric of our daily living. By way of analogy here, we can point to such advances that have already been achieved on the biological level. It can no longer be questioned that poor sanitation favors disease, though in

the past there were many dissenting opinions and even ridicule of those who first championed the theory. Now, however, society itself has made an orientation, an adjustment —one of a great many it has made— to include this incontrovertible knowledge in its very structure—in health departments, public health services, meat and water inspections, and so on

This promise of better things to come does not mean that we can afford to ignore the realities of the present world situation but does point to a possible way out of our world dilemma if we can only establish conditions favorable to the application of research findings And it means that at last it may be possible to focus the efforts of modern science around man as the center, in which case the ultimate value of all our past and present scientific endeavor *could* be its actual contribution to man's welfare and happiness.

Often we have poked fun at such "Utopian dreams," at attempts to delineate future society. Throughout the centuries, however, men have sketched out their dreams of Utopia —the ideal world. Each one has drawn his fantasy from the elements of his own times, magnifying some features, eliminating others From Plato's "philosopher kings" to the socialist Utopia of H G. Wells or the mock authoritarian perfection of George Orwell's *1984*, each new philosophical and scientific advance has indicated some kind of Utopia. Although such fantasies are often unrealistic and even misdirected, they may not be as futile as they seem, for they do serve to draw out the implications of current knowledge, attitudes, and hidden premises In them we see more clearly not only the inadequate aspects of our present ways, but also, in our mind's eye, the distant goals toward which we are aiming. Today we feel that as our scientific knowledge grows we shall be increasingly able to establish conditions conducive to both psychological and sociological welfare in which each individual may be able to realize his potentialities and utilize them in the interests of himself and society We do not expect to eliminate conflict and unhappiness, but are beginning to see how much we may accomplish by using our scientific knowledge intelligently toward the reduction of mental ill health and the development of better interpersonal relationships

THE INDIVIDUAL'S CONTRIBUTION

When students become aware of the tremendous scope of the mental health problem and the relatively inadequate facilities for meeting it, they often ask "What can I do?" Because of the frequency of this question, and because of the magnitude of the problem facing us nationally and internationally, it may not be inappropriate to suggest for interested students a few of the lines of action that can profitably be taken

Professionally, of course, there are many opportunities open to college graduates in the field of mental health, broadly conceived Social work, psychiatric nursing, clinical psychology, and psychiatry itself—all are rewarding, both in monetary and spiritual terms* As we have seen, the personnel shortage is great in these fields

As citizens, college graduates participate in the many community institutions working toward mental health Whatever their profession—teacher, lawyer, homemaker, businessman, trade-unionist—their interests are at stake, directly and indirectly A citizen can find innumerable ways to be of direct service if he is familiar with the local and national private and government organizations working for mental health (outlined in Chapter 14) and takes pains to be cognizant of his community's special needs and problems*

All of us are also concerned with mental health for very personal reasons we want to overcome the harassing problems that trouble

* See Appendix (p 604) for more specific information

everyone in modern living and find our share of happiness and "peace of mind" To help us in achieving this goal, we need to have an active interest in our own mental health and the courage to admit that "abnormal psychology" may involve even us. When the going becomes too difficult, the mature person seeks competent psychological assistance with his problems in the same way that he would go to a medical specialist for appendicitis or other physical ills Similarly, he may try to educate his family and friends to understand how psychiatry can help them with certain problems.*

Finally, all of us can contribute to mental health by continually reminding ourselves of the following basic truths which we have emphasized in the course of the present book.

1. Mental illness is not a disgrace It can happen to anyone if the stress is sufficiently severe or prolonged
2. From time to time, all of us have difficulties in dealing with our problems We are not alone in our struggles
3. Psychiatric counsel can help us with our problems and is available via many public and private clinics and other agencies.
4. As in physical illness, the early detection and correction of pathological trends is of great importance in preventing the development of chronic mental disorders
5. Social preventive measures based upon scientific findings represent the most effective long-range approach to the solution of both group and individual mental health problems

* See Appendix (p 604) for more specific information

To remind ourselves of these truths is essential because statistics show that almost all of us will, in our lifetimes, have to deal with mental illness in ourselves or in those close to us The close interdependence among us, and the loss to us all, individually and collectively, when any one of us fails to achieve his potential are eloquently brought out in the famous lines of John Donne

"Perchance he for whom this Bell tolls, may be so ill as that he knows not it tolls for him And perchance I may think myself so much better than I am, as that they who are about me, and see my state, may have caused it to toll for me, and I know not that . .

"No man is an island, entire of itself, every man is a piece of the Continent, a part of the main, if a clod be washed away by the sea, Europe is the less, as well as if a promontory were, as well as if a manor of thy friends or of thine own were Any man's death diminishes me, because I am involved in mankind And therefore never send to know for whom the bell tolls It tolls for thee"

REFERENCES

The reference list includes not only the sources from which the author has drawn material, but acknowledgments of the permissions granted by authors and publishers to quote directly from their works

1 From *The Shame of the States,* copyright, 1948, by Albert Deutsch Reprinted by permission of the author and Harcourt, Brace and Company, Inc

2 Group for the Advancement of Psychiatry Report No 5, 1948

3 Menninger, William C *Facts and Statistics of Significance for Psychiatry* The Hogg Foundation, University of Texas, 1948

4 Menninger, William C "Psychiatry Today" *Atlantic Monthly,* January 1948, pp 65-77

APPENDIX

INFORMATION FOR STUDY AND ACTION

It is hoped that the following information will prove helpful to students—both in college and in later years—who may wish to follow through independently some of the lines of interest suggested by this book

Before undertaking independent study or action in the field of mental health, it will be helpful to write to the following organizations, and ask for a free publications list They distribute reading lists and much free and low-cost literature on many aspects of abnormal psychology and mental hygiene

National Association for Mental Health
1790 Broadway
New York 19, New York

Publication and Reports Division
National Institute of Mental Health
United States Public Health Service
Bethesda 14, Maryland

For information about volunteer work in mental hygiene, write

National Association for Mental Health
1790 Broadway
New York 19, New York
(for names and addresses of local committees active in improving community mental health)

Work and Study Projects
American Friends Service Committee
20 South 12th Street
Philadelphia 7, Pennsylvania
(re volunteer work in mental hospitals)

For information about courtship, marriage, child-rearing, and family life, write the following for their free publications list.

Association for Family Living*
28 East Jackson Boulevard
Chicago 4, Illinois

Child Study Association of America*
132 East 74th Street
New York 21, New York

United States Children's Bureau
Federal Security Agency
Washington 25, D C.

* Write to these also for information about their counseling services and discussion groups in the Chicago and New York areas respectively (See p 578) The Child Study Association also advises discussion groups throughout the country

National Association for Mental Health
1790 Broadway
New York 19, New York

New York Committee for Mental Hygiene of the State Charities Aid Association
105 East 22nd Street
New York 10, New York

For information about special problems, write to the following for a free publications list

Research Council on Problems of Alcohol
60 East 42nd Street
New York 17, New York

National Probation and Parole Association
1790 Broadway
New York 19, New York

National Epilepsy League
Room 1916
130 North Wells Street
Chicago 6, Illinois

National Society for Crippled Children and Adults, Inc
11 South La Salle Street
Chicago 3, Illinois

For information about training requirements in the various fields related to abnormal psychology, write to the following:

Clinical Psychology

Division of Abnormal and Clinical Psychology
American Psychological Association
1515 Massachusetts Ave, N W
Washington 5, D C

Committee on Clinical Psychology
Group for the Advancement of Psychiatry
3617 W 6th Avenue
Topeka, Kansas

Psychiatric Nursing

National League for Nursing Education
1790 Broadway
New York 19, New York

Social Work

American Association of Social Workers
1 Park Avenue
New York 16, New York

Personnel Department
Family Service Association of America
192 Lexington Avenue
New York 16, New York

Psychiatry:
American Psychiatric Association
1270 6th Avenue
New York, New York

Psychoanalysis
American Psychoanalytic Association
245 East 82nd Street
New York, New York

Some students may wish to consult qualified psychotherapists, either during college or in later years. In college, they may obtain the names of qualified therapists from student deans or counselors, or from professors of abnormal or clinical psychology. Outside the college community, unfortunately, psychotherapeutic facilities are extremely limited, especially for individuals or families of average income.

(1) Psychiatrists and clinical psychologists in private practice often have waiting lists and may be comparatively expensive; this is particularly true of psychoanalysis, which often lasts two or more years and may cost several thousand dollars. Most psychologists and psychiatrists, however, offer briefer intensive therapy. (2) For those who cannot afford psychotherapists in private practice, low-cost clinics are a possible recourse. However, facilities are extremely limited, especially outside the larger cities. (Eleven states have only one or no psychiatric clinics.) (3) An excellent possibility for those of average income, or for those who are not sure that extended psychiatric or psychoanalytic treatment is necessary, is the local family service agency. These agencies are a source of help on social and emotional problems, of both personal and family nature. They can also, if necessary or possible, make referrals to other community facilities such as psychotherapists, psychiatric clinics, or child-guidance clinics. There are 250 agencies in the Family Service Association of America, located in about 200 cities. Taking the country as a whole, however, there are millions of people living in areas where no qualified professional help of any kind is available for problems of adjustment.

With these limitations clearly in mind, the student may find the following organizations helpful in suggesting sources of qualified psychotherapeutic help:

American Psychiatric Association
1270 6th Avenue
New York, New York
(Will give names and addresses of qualified local psychiatrists, if any)

Division of Abnormal and Clinical Psychiatry
American Psychological Association
1515 Massachusetts Ave., N.W.
Washington 5, D. C.
(Will give names and addresses of qualified local clinical psychologists, if any)

American Psychoanalytic Association
245 East 82nd Street
New York, New York
(Will give name and address of qualified local psychoanalysts or psychoanalytic institutes, if any)

Family Service Association of America
192 Lexington Avenue
New York 16, New York
(Will give names and addresses of local family service agencies, if any)

National Institute of Mental Health
Federal Security Agency
Bethesda 14, Maryland
(Will give names and addresses of local psychiatric clinics, if any)

In addition, veterans may receive assistance through Veterans Administration Hospitals and Clinics. For information relative to the nearest installation, write to:

Veterans Administration
Washington, D. C.

ABNORMAL PSYCHOLOGY IN LITERATURE

The complexities and mysteries of the human psyche have been constantly depicted by the great writers of all peoples. Time and again we find that the discoveries we are making in our scientific work have long been part of the intuitive knowledge of novelists, playwrights, poets, and biographers

ANALYSES OF CLASSICAL WRITERS AND THEIR WORKS

Among the classical writers it is difficult to choose only a few to recommend to the student of abnormal psychology. In drama, Shakespeare, Racine, Ibsen, Molière, and Chekhov are especially rewarding for their psychological penetration Among novelists, the reader will find great riches in Tolstoy, Dostoevski, Flaubert, Hawthorne, the Brontes, Fielding, and Petronius (a Roman novelist who wrote about homosexuality and other abnormalities in the time of Nero) He will find Gorki's autobiography fascinating, with its vivid account of the life of the people in late nineteenth-century Russia Gorki's work gives great insight into the conditions of life in all premodern cultures, before the age of the mental hospital, when alcoholics, suicides, psychotics, and neurotics of all kinds formed part of every child's daily experience The student will enjoy identifying in this work some of the types of abnormal behavior he has studied in the present volume Another interesting biographical work is Suetonius' famous *Lives of the Twelve Caesars,* showing psychological and sexual abnormalities

These few suggestions are made simply to indicate the range and kind of insights available from the literature of the past It is impossible to list here more than a very few of the world's great writers, and impossible to indicate adequately how their works, conceived in a frame of reference different from that of modern psychology, may be analyzed for contributions to our understanding of abnormal behavior It may be helpful, however, to suggest here, as a guide, a few outstanding modern psychological analyses of some of the classical writers and their works

Articles·

Deutsch, H "Don Quixote and Don Quixotism." *Psychoanalytic Quarterly,* 1937, 215-222

Draper, J W. "Lady Macbeth." *Psychoanalytic Review,* 1941, 479-486.

Duff, L. F G "A One-sided Sketch of Jonathan Swift" *Psychoanalytic Quarterly,* 1937, 238-259

Freud, S "Psychopathic Characters on the Stage" *Psychoanalytic Quarterly,* 1942, 459-464

Friedlander, K "Charlotte Bronte a Study of a Masochistic Character" *International Journal of Psycho-Analysis,* 1943, 45-54

Gorer, G "The Myth in Jane Austen" *American Imago,* 1941, 197-204

Grotzahn, M "About the Symbolization of Alice's Adventures in Wonderland" *American Imago,* 1947, 32-41

Karpman, B "Neurotic Traits of Jonathan Swift as Revealed by *Gulliver's Travels*" *Psychoanalytic Review,* 1942, 26-45, 165-184

Miller, M L. "Balzac's *Père Goriot*" *Psychoanalytic Quarterly,* 1937, 78-85

Oberndorf, C P "The Psychoanalytic Insight of Nathaniel Hawthorne" *Psychoanalytic Review,* 1942, 373-385

Levi, A W. "The 'Mental Crisis' of John Stuart Mill" *Psychoanalytic Review,* 1945, 86-101

McCurdy, H G "A Study of the Novels of Charlotte and Emily Bronte as an Expression of Their Personalities" *Journal of Personality,* 1947, 109-152

Kanzer, Mark "Dostoevski's Matricidal Impulses" *Psychoanalytic Review,* 1948, 115-125

Rosenzweig, S "The Ghost of Henry James a Study in Thematic Apperception" *Character and Personality,* 1943, 79-100.

Schatia, V. "Hedda Gabler's Doll House" *Psychoanalytic Review,* 1939, 33-38

Schatia, V "Peer Gynt—a Study of Insecurity" *Psychoanalytic Review,* 1938, 49-52

Skinner, John "Lewis Carroll's Adventures in Wonderland" *American Imago,* 1947, 3-31

Wijsenbeek, C "Marcel Proust" *American Imago,* 1941, 323-346.

Wisdom, J O "The Lust for Power in Hedda Gabler." *Psychoanalytic Review,* 1944, 419-437.

Wolberg, L R. "The Divine Comedy of Dante." *Psychoanalytic Review,* 1943, 33-46

Young, A McC *The Sonnets of Shakespeare; a Psychosexual Analysis* Columbia, Mo , 1937.

Books:

Hoffman, Frederick J *Freudianism and the Literary Mind* Baton Rouge Louisiana State University Press, 1945.

An account of how Freud's discoveries spread into the literary world and influenced such major writers as Joyce, Lawrence, Kafka, Mann, and Sherwood Anderson, as well as scores of other lesser writers in America and abroad

Jones, Ernest *Hamlet* (including text of the play) New York Funk, 1948

A famous psychoanalytic study which traces Hamlet's indecision to his guilt feelings about his own hostility toward his father.

Trilling, Lionel *The Liberal Imagination.* New York Viking Press, 1950

This collection of critical essays by the well-known Columbia University professor contains a valuable essay on "Freud and Literature," in which he discusses the role of psychoanalysis in the literature and criticism of our times.

Wormhoudt, Arthur, Ph.D *The Demon Lover A Psychoanalytic Approach to Literature.* Foreword by Edmund Bergler, M D New York Exposition Press, 1949

Dr Wormhoudt has analyzed representative works of five major nineteenth-century poets—Coleridge, Wordsworth, Keats, Shelley, and Byron—and, correlating the poems with significant biographical details, he presents an intimate psychological portrait of each of the great writers studied.

PSYCHIATRY IN MODERN LITERATURE

During the last thirty years, with our great increase in psychological knowledge and understanding, the psychiatric emphasis on (1) unconscious factors in motivation and (2) the great influence of childhood events in later behavior has come to be so widely known that few of our modern literary works are not affected by it. Thus, again, it is difficult to select a limited list, and the following suggestions are offered only as starting points *

Aiken, Conrad. *Great Circle* New York Scribner, 1933.

A complex and sophisticated novel about a man who seeks the road to self-understanding through psychoanalysis Written by a Pulitzer Prize poet who has had lifelong associations with the psychoanalytic movement.

Aswell, Mary L (and Frederic Wertham, M D). *The World Within Fiction Illuminating the Neuroses of Our Time* New York Whittlesey House, 1947

A collection of modern short stories, with introduction and analyses by the psychoanalyst Frederic Wertham

Bowen, Elizabeth *Death of the Heart* New York Knopf, 1939

A sensitive and moving account of the neurotic inability to love A warm, imaginative child is brought, because of her mother's death, into the cold, distorted atmosphere of her half-sister's home This is the story of the "death of her heart" Written without clinical terms, but with great psychological insight, by one of England's most distinguished modern novelists

Coates, Robert M *Wisteria Cottage* New York Harcourt Brace, 1948

This novel is about a schizophrenic who becomes a murderer A fictional study of the intellectual and emotional mechanisms

Engstrand, Stuart *The Sling and the Arrow.* New York. Creative Age Press, 1947

An absorbing novel about a married man who gradually discovers that he is homosexually inclined, and about the disintegration of his marriage and his breakdown One of the first of what one psychoanalyst has predicted will be

*In all cases, editions listed are those easily available, not always first editions

a large number of novels about latent homosexuality as a cause of marital difficulties.

Harvin, Emily (pseud.) *The Stubborn Wood.*
Chicago: Ziff-Davis, 1948.

This novel of the sadistic treatment of patients in a private asylum is based on facts furnished by a state investigator. Realistic, vivid picture.

Howard, Sidney. *The Silver Cord.*
In *The Theatre Guild Anthology.*
New York: Random House, 1936.

A play about the relationship between an overdominant mother and her adult sons, and their struggles to escape from her and form mature sex relationships in marriage.

Jackson, Charles. *The Lost Weekend.*
New York: Rinehart, 1944.

A best-selling novel (later a movie) about the subjective and objective experiences of an alcoholic. Shows the compulsive need for liquor which makes it so difficult for the alcoholic to stop drinking and maintain stable relationships.

Joyce, James. *Ulysses.*
New York: Modern Library, 1940.

A great modern novel written in the stream-of-consciousness technique. It shows all the thoughts that come into one man's mind as he goes his twenty-four-hour round of life in Dublin. His unconscious associations bring up many apparently "abnormal" sexual fantasies, revealing his basic sexual maladjustment. This novel, though difficult reading, yields rewarding insight into subjective life.

Kafka, Franz. *The Trial.*
New York: Knopf, 1937.

The subjective thoughts and outlook of a paranoid personality. The story centers around the arrest and trial of an "innocent" man for a "crime" which is never explained to him. It clearly shows the paranoid's inability to grasp reality, and his tendency to interpret all events (especially those involving figures of authority) as unwarranted and mysterious persecution.

Koestler, Arthur. *Arrival and Departure.*
New York: Macmillan, 1943.

The story of a young radical of Eastern Europe who has escaped from years of torture after refusing to disclose the secrets of the underground. Upon undergoing psychoanalysis for a severe neurosis, he discovers the childhood origin of his radical beliefs and activities and is able to see the extent to which they have a real as well as a neurotic value to him.

Lipsky, Eleazar. *The Kiss of Death.*
New York: New American Library of World Literature, 1947.

This novel, written by a New York district attorney, shows clearly and sympathetically the asocial and antisocial attitudes of the "hardened" criminal: his relations to society, the police, his family, and his fellow criminals. The story is about a man who grew up in a slum environment, becomes a successful criminal, and then tries to "go straight." The social and psychological forces keeping him a criminal are dramatically revealed.

Maier, Howard. *Undertow.*
New York: Doubleday, 1945.

A white soldier in Texas becomes upset and depressed over the lynching of a Negro soldier. This situation reactivates old guilt and conflict over the death of his psychotic brother, culminating in a breakdown. His infantile conflicts are revealed by means of flashbacks.

Malaparte, Curzio. *Kaputt.*
New York: Dutton, 1946.

A first-hand description, written by an Italian journalist, about Nazi officials and soldiers during the war. Shows their perverted and sadistic behavior toward subject peoples. An intimate account by a man with a rare opportunity for observation.

Mann, Heinrich. *Little Superman.*
New York: Creative Age Press, 1945.

This novel, written in 1921, shows the "good" German businessman at home and at work, toadying to the powerful, and cruel to the weak. We get here an insight into the family structure and social milieu that fostered the abnormal Nazi mentalities.

Miller, Arthur *Death of a Salesman*
New York Viking, 1949
A Pulitzer Prize play about the psychological and economic struggles of a lower middle-class American family Two sons are seen growing up with an overprotective mother and a father who is intensely ambitious and competitive and lives largely in almost schizoid fantasy The play depicts the tragic consequences which sometimes result when the American dream of "success" is frustrated by economic reality

O'Neill, Eugene *Mourning Becomes Electra* In *Nine Plays of Eugene O'Neill*
New York Modern Library, 1941
Deliberately using Freudian insights, the playwright has translated the Electra-Orestes trilogy of Aeschylus into the New England of Lincoln's time In the last act, Orestes' atonement to the gods has been deleted from the plot of the original, and his conflicts are worked out within his own ego.

Paton, Alan. *Cry, the Beloved Country*
New York Scribner, 1948
This unusual novel of race relations and crime is distinguished by clear understanding of psychological motives and of the environmental background of behavior. As a result, the author draws no sharp "black-white," "right-wrong" dichotomy, but shows understanding compassion for both "sides" and suggests a realistic program for reform Although the novel is set in South Africa, it is full of insights for American readers

Peters, Fritz *The World Next Door*
New York Farrar Straus, 1949
A man's struggle to regain his balance in a mental hospital for veterans Karl Menninger has said of this book "Nothing that has ever appeared, to this reviewer's knowledge, gives so accurate a portrayal of the schizophrenic process "

Proust, Marcel *Swann's Way*
New York Modern Library, 1928
An intensely emotional, richly detailed novel of childhood, written in the stream-of-consciousness technique One of the great works of our time Shows a little boy's mother fixation, which in later novels in the series is seen to lead to homosexuality

Sachs, Wulf *Black Anger.*
Boston Little Brown, 1947. Written by a South African psychoanalyst
This is an account, in novel form, of the psychoanalysis of an African medicine man by a modern Western psychoanalyst The treatment shows that the motives underlying the African's behavior are similar to those found in Europeans, with significant cultural variations

Shulman, Irving *The Amboy Dukes*
New York Doubleday, 1947
This novel gives life to the often-heard statement that slums breed abnormal (especially criminal) behavior Shows a teen-age gang in its total environment, with vivid descriptions of home background, neighborhood conditions, sexual behavior, and criminal activities

Sinclair, Jo, pseud *Wasteland*
New York Harper, 1945. The winner of the 1946 Harper prize
The story of a crack news photographer of a New York paper His concealment of his Jewish antecedents results in inner turmoil which brings him to a psychiatrist, through whose interviews the tale is developed.

Smith, Lillian *Killers of the Dream.*
New York W W Norton, 1949
A psychological study of segregation in the South The author analyzes the effect upon children of having to reject the Negro nurse whom they have loved and have been loved by, and the effect upon adults of the Negro-white sexual relationships which are officially taboo

Taylor, Daniel *They Move with the Sun.*
New York Farrar Straus, 1948
A psychological study of development of a sensitive Jewish boy shown against the background of his social and physical environment in a growing industrial area

AUDIO-VISUAL AIDS

Many of the concepts of abnormal psychology are difficult for the student to understand and use in real-life situations These concepts are necessarily both abstract and complex, and so must be expressed in abstract words and technical terms which are unfamiliar to the layman. Ideally, every student should supplement written and spoken words (symbols) with laboratory exercises, if possible, and visits to clinics and hospitals. Furthermore, a deep understanding of abnormal psychology can come only from wide experience in real life from observing many kinds of people in school, family, church, social agencies, courts, industry, hospitals, clinics, and hundreds of other situations where people live and work and receive therapeutic help Obviously, however, there are often serious practical difficulties which make such supplements to reading and class study impossible on any large scale

One of the great values of films and other audio-visual demonstrations is that they offer a supplementary means of giving concreteness and realism to the study of psychology. Through recordings and films the student can visit research laboratories, clinics, and a wide range of real-life situations which would otherwise be inaccessible to him.

RECORDINGS

Two series of excellent recordings, *The Tenth Man* and *For These We Speak*, have been produced by the National Mental Health Foundation These recordings were originally intended for radio broadcast by nonprofit organizations devoted to the promotion of mental health. They have been widely used on radio, but are also available for sale, at relatively low cost, to educational groups.* All recordings were produced in cooperation with the National Broadcasting Company, and many of the nation's leading radio actors appear in the dramatizations. The recordings are of high dramatic as well as psychological quality

All records are on 16-inch vinylite discs, and require a 33-1/3 r p m turntable They are thus practicable for most classroom situations Records may be purchased (a) in sets of the entire series, or (b) in groups as listed below, with each group consisting of program run back-to-back on the same record or records

Address all inquiries to
Audio-visual Aids Section
National Association for Mental Health
1790 Broadway
New York 19, New York

The Tenth Man

Ralph Bellamy, narrator Each of the 13 recordings runs 13 min, 10 sec

GROUP A· 9, 14† — 1 **Punishment Without Crime:** Dramatizes the archaic and inhuman commitment procedures still prevalent in many states which require mentally ill persons to be lodged in jails and go through court proceedings before they can be hospitalized.
2 **The Silent Men:** A poignant story which demonstrates the value of women's volunteer units in mental hospitals

GROUP B 14 — 3 **The Child Is Father of the Man:** Demonstrates how a young mother's too-strict adherence to the textbook in bringing up her child results in an anxiety state which produces a feeding problem and a speech defect in the child

GROUP C 8·14 — 4 **The Old Folks at Home:** A dramatization of the need and mental health function of community recreational centers for older people

* Although these sets are not generally available on a rental basis, many state and voluntary health and welfare departments own sets which they may lend to educational institutions

† Numbers in boldface type refer to the chapters in *Abnormal Psychology and Modern Life* for which recordings are particularly relevant

5 **Which World for Susan?:** A well-intentioned parent unwittingly encourages her daughter to take refuge in a dream world, is convinced by an understanding teacher of the tragic implications of her daughter's behavior Susan's dilemma is resolved and she is set on the right course toward mental health

GROUP D 14 — 6 **Love Without Words·** The purpose of this play is to show the function of the Marriage Council, and its contribution to the mental health of the community it serves

13·15 — 7 **On Wings of Clay:** A glimpse of a modern mental hospital highlighting the value of a good occupational therapy program in contributing toward the recovery of mental patients

GROUP E 14 — 8 **Out of the Shadow:** Attacks the problem of employer prejudice toward persons who have successfully recovered from mental illness

11 — 9 **Figs from Thistles·** Demonstrates that, given proper understanding, a mental defective who does not need to be institutionalized can make a suitable and happy adjustment to both his family and community life

GROUP F. 14 — 10 **Doctor Troubleshooter:** Takes the listener into a large industrial plant and shows how a complaining, ineffectual employee, about to be fired, was transformed into a happier, better integrated individual through a program of industrial psychiatry

14 — 11 **The Tie that Binds·** Dramatizes the dilemma faced by a mother who, after a successful recovery from mental illness, returns home, only to find that she is treated as an invalid and plagued by the stigma falsely attached to her past illness A plea for more adequate social work coverage in public mental hospitals, so that families may be more intelligently informed and prepared

GROUP G 15 — 12 **Out of Sight, Out of Mind·** In this play, Sarah Stevens, who has just admitted her husband to the state hospital, learns that personnel shortages resulting from lack of adequate appropriations will diminish her husband's chances of getting prompt treatment She learns public apathy is to blame and sets out to mobilize public support for better conditions

14·15 — 13 **The Lady and the Lawmakers:** Dramatizes the political aspects of the mental health problem and the role of the citizen in achieving better psychiatric facilities With the help of a crusading reporter, Sarah Stevens mobilizes civic groups in an educational campaign eventually bringing about increased government funds

For These We Speak

Each of the 8 recordings runs between 13 and 14 minutes

GROUP I 13·15 — 1 **The Story of Louise Mapleton:** Demonstrates what can be accomplished in a well-run state hospital (With brief introduction by Miss Helen Hayes)

13·14 — 2 **The Case of Cynthia Edwards:** Highlights the therapeutic possibilities of foster-home care for convalescent mental patients (With brief introduction by Miss Helen Hayes)

GROUP II 14 — 3 **P. Q. Gets Another Chance:** Relates the ability of the recovered mental patient to make a successful return to a useful occupation if given understanding and proper handling by employer (With brief introduction by Mrs Franklin D Roosevelt.)

1 — 4 **Aunt Milly and the Family Skeleton:** Focuses attention on the theme,

"mental illness is no disgrace" (With brief introduction by Mrs Franklin D Roosevelt)

GROUP III· 13·15 5 **Hats off to Sarge:** Gives due recognition to the significant role the well-trained attendant plays in the recovery of mental patients (With brief introduction by Miss Mary Jane Ward)

14 6 **Joe Chandler Gets a Lift.** Demonstrates the importance of getting along with others as an essential to mental health (With brief introduction by Dr Harry Emerson Fosdick)

GROUP IV 14 7 **The Kopecs' Dilemma.** Illustrates how an out-patient mental hygiene clinic program can help foster a community program of mental health (With brief introduction by Miss Mary Jane Ward)

11 8 **Forgotten Children:** Presents the story of a mental defective who, given proper training, is able to adapt himself to a useful place in the community (With brief introduction by Dr Harry Emerson Fosdick.)

FILMS

The films on the following pages have been carefully selected, from many sources, as particularly germane to the content of this book * The films are listed by chapter, paralleling the subject matter of the book However, several of the films would be relevant to more than one chapter and the instructor will use his discretion in scheduling these.

Although this list does not contain all of the films in the field it is felt that an instructor can use it to make up a well-balanced film schedule according to the needs of his students and the time available for film showings However, the number of films in psychology and its branches has grown so large that it would be obviously impossible to include all the films on all the ramifications of "abnormal psychology in modern life," and especially on the broad causes of abnormal psychological conditions The present list includes only a few key films out of the many excellent ones available on (a) personality development, (b) child care and child development, (c) mental hygiene and "adjustment," (d) neurology, (e) psychiatry, (f) care of mental hospital patients, (g) social problems related to abnormal psychology Some have been rejected as too elementary, or too popularized, for serious students above the elementary level More important is the fact that while all these subjects are certainly related to abnormal psychology, each forms a specialized area too complex to present in detail in one course. Thus the instructor who wishes to show more films in any of these areas should send for the catalogues of PCR, NYU, IFB, and other film distributors (Explanations of abbreviations, along with addresses of distributors and information on ordering films, are given on pages 620-621.)

Psychiatry in Action. 1943, British Sound, 63 min Available sale PCR, IFB, BIS Available rental PCR, NYU, IFB
1·12·13†

The work of a British hospital specializing in the treatment of military and civilian war neuroses, with the aim of rapid rehabilitation Scenes include preliminary interviews, psychological tests, drug therapy, electro-shock therapy, narco-analysis, group recreational and occupational therapy, and reassignment of patients to civilian or military duties

City of the Sick 1950, National Mental Health Foundation Sound, 20 min Available sale NAMH Rental. AsF.
1·13·15

The story of a mental hospital attendant, in his own words The film shows him learning to regard the mentally ill not as objects of repulsion

* Thanks are due to the Group for the Advancement of Psychiatry, whose recent evaluation of mental-health films was freely consulted in the preparation of this list However, the Group is to be considered in no way responsible for the content of this list

† Numbers in boldface type refer to the chapters in *Abnormal Psychology and Modern Life* for which films are particularly relevant

Wertham, Frederic *Dark Legend.*
New York: Doubleday, 1949
This novel, written by a psychoanalyst, concerns the psychological story of a young murderer: his family and social background, and the motives that drove him to kill

Wolfenstein, Martha, and Leites, Natan.
The Movies A Psychological Study Glencoe, Ill Free Press, 1950
An unusual study, by two psychologists, of the cultural significance of the movies in the United States and European countries Certain important themes, such as family relations, attitudes toward violence and death, and sexual behavior, are examined in the light of recent well-known films Dr René A Spitz of the New York Psychoanalytic Institute says of the book "This is an extraordinary and exciting book which offers an acute social anthropological documentation, a scientifically verifiable picture, of the unconscious dynamics of present day United States culture."

NOTE For an authoritative reading list of books concerned with particular aspects of abnormal behavior discussed in the preceding chapters, see *A Guide to Psychiatric Books* by Karl A. Menninger and George Devereux. New York Grune and Stratton, 1950.

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but as human beings who can be restored to useful living Filmed in a mental hospital, all ward activity scenes were taken as they occurred in ordinary hospital routine.

The Dynamics of Competition in Cats: Inter-Cat Relationships in a Manipulative Feeding Situation. 1943-44, J. H. Masserman. Silent, 15 min Available sale or rental PCR.
3

Cats trained previously to manipulate a switch which releases food pellets into their food box are put into the experimental cage in pairs. In this social food-getting situation, patterns of co-operation, conflict, dominance, and active and passive parasitism develop, with manifestations somewhat parallel to those seen in interhuman relationships

The Feeling of Hostility. 1948, Canadian Sound, 32 min Available sale or rental PCR, NYU, IFB Available rental· BF, VE, WD
3·4

One of the series in Mental Mechanisms produced for the Mental Health Division of the Department of National Health and Welfare of Canada The case history of a girl who in childhood develops strong hostility and fear of love, and who turns to intellectual competition and achievement for her emotional gratification The case is traced from childhood, and the relationships between family members clearly shown. (See pages 114-115 for pictorial synopsis.)

This Is Robert 1942, Vassar College. Sound, 40 min Available sale or rental NYU, PCR
3·4

Traces the development of a "difficult" child from the age of two to seven, showing emotional development and socialization. His behavior is shown in relation to home environment and to the guidance of the nursery school. His traits of aggressiveness and compulsive clinging to routine are shown to result from the need for clear, firm treatment by adults Other behavior traits are revealed as they developed or were altered under careful guidance over the five-year period.

Baby Meets His Parents. 1948, Encyclopaedia Britannica. Sound, 11 min Available sale EB, PCR. Available rental PCR, NYU, IFB
3·4

Shows how differences in personalities can be accounted for, not only by heredity, but also by the environmental factors during the first years of life Emotional factors are stressed.

A Psychoneurosis with Compulsive Trends in the Making· Life History of Mary from Birth to Seven Years.* 1947, Dr Margaret E Fries, the New York Infirmary Silent, 48 min Available sale or rental NYU
3·4·6

This film shows how a child with superior biological capacity and an active congenital activity type develops a neurosis through interaction with those in her home environment The film follows Mary's ego development from birth to seven years, illustrating how the so-called "average child"—in a family which society considers normal—may never be referred for psychiatric treatment This situation is typical of thousands of children whose potentialities for development are never realized, although they outwardly conform to social standards of conduct

Preface to Life. 1950. First of a series of films produced for the National Institute of Mental Health, and the United States Office of Education Sound, 28 min Available sale or rental CF or address inquiries to the mental health authority of each state, or to the National Institute of Mental Health, Bethesda 14, Md.
3·4·6

Produced with the help of an advisory committee of specialists in the field of mental health, psychiatrists, psychologists, and educators Stresses the importance of childhood experiences in affecting mental attitudes and emotional maturity for life, describing how the same child might turn out under four different types of parental handling

* Not available to lay groups (outside colleges or professional meetings)

The Dynamics of an Experimental Neurosis: Its Development and Techniques for Its Alleviation. 3·4·6 A series of four films, made from experiments conducted in 1941-44 by Jules H Masserman, M D, at the Neurophysiological Laboratory of the Division of Psychiatry and the Otho S. A Sprague Institute, University of Chicago (See page 620 for synopses of Parts III and IV) Available sale or rental. PCR

Part I Conditioned Feeding Behavior and Induction of Experimental Neuroses in Cats Silent, 21 minutes An apparatus for producing an experimental neurosis in cats is illustrated Cats are trained to respond to a light or bell signal by going to the food box, into which pellets of food have been released, lifting the lid, and obtaining the food A motivational conflict is then induced by blowing a blast of air at the cat just as it is obtaining the food This induces inhibition of feeding and other inhibitions, sensory hyperesthesias, specific phobias, motor disturbances, recurrent physiologic signs of "anxiety" and other "neurotic" patterns in and out of the experimental situation (See page 165 for pictorial synopsis and fuller description of procedures and results)

Part II. Effects of Environmental Frustrations and Intensification of Conflict in Neurotic Cats Silent, 16 min In this second part of the film, various types of environmental frustrations are contrasted with those produced by experimental motivational conflict.

Dominance, Neurosis and Aggression in Cats. 3·4·6 13 1942-43, J H Masserman and P. W. Siever. Silent, 30 min. Available sale or rental: PCR.

Cats trained in groups of four to compete for food form a stable hierarchy of dominance Aggressive behavior appears in an animal when (1) it is displaced by a more dominant animal, or (2) it is made experimentally neurotic. Goal-directed behavior is then deviated into aggression mainly directed against animals above it in the hierarchy Amytal temporarily mitigates the neurosis and restores nonaggressive dominance Concluding subtitles summarize the dynamic interrelationships of dominance, neurosis, and aggression

The Quiet One. 1948, Film Documents Sound, 3·4·9 70 min. Available rental. AF.

A stirring documentary film about a neglected child in Harlem who, as a result of his environmental experiences, becomes "delinquent" Shows treatment at Wiltwick School on the Hudson (See pages 74-75)

The Feeling of Rejection. 1947, Canadian Sound, 3·4·13 23 min Available sale or rental PCR, NYU, IFB. Available rental· BF, VE, WD

One of the series in Mental Mechanisms produced for the Mental Health Division of the Department of National Health and Welfare of Canada The case history of a timid, self-effacing office worker, age 23, who consults a psychiatrist because of psychogenic headaches In flashbacks, the source of her difficulty is traced to childhood, when rejection and overprotection by her parents prevented her from engaging in normal activities and aroused hostility which found a somatic outlet in the headaches Group therapy is briefly shown

Problem Children. 1946, Ohio State Mental 3·4·14 Hygiene Service Sound, 20 min Available sale· OS, PCR. Available rental NYU, PCR.

Two seventh-grade children, one a bully and one excessively shy, present special problems to their teacher. The film traces the family background of the children, showing the relationship between school and home and techniques for helping the children.

Frustration Play Techniques. 1942, Vassar College Sound, 40 min. Available sale or rental NYU 3·12

The first part of the film shows ego-blocking games, the second part, frustration and hostility games. Both parts demonstrate projective tech-

niques developed by Dr. Eugene Lerner of Sarah Lawrence College, for the study of ego development and the demarcation of the self in young children The different reactions of different children are interestingly contrasted The relation between frustration and hostility is particularly emphasized

Some Examples of Hypnotic Behavior 1946, P.
3·13 L. Harriman Silent, 11 min Available sale or rental PCR

A demonstration of behavior in deep hypnosis: including hypnotically induced illusions and hallucinations, regression, sensory selection and agnosia writing, and immediate posthypnotic disorientation and gradual reorientation

Behavior in Hypnotic Regression. 1942, P L
3·13 Harriman. Silent, 18 min Available sale or rental PCR

A hypnotized subject is instructed to return to earlier age levels, starting at about two and a half years, and is then "raised" to higher age levels Her behavior at each level roughly corresponds to typical behavior at that age level

Meeting Emotional Needs in Childhood: The
3·14 **Groundwork of Democracy.** 1947, Vassar College Sound, 33 min Available sale or rental NYU.

Demonstrates the importance of satisfying emotional as well as physical needs and some of the ways this can be done, both in a classroom situation and in the home at different age levels

Studies of the Psychoanalytic Research Project on
4 **Problems of Infancy** Produced by Dr René A Spitz Available sale and rental NYU

Grief 1947 Silent, 30 min * After prolonged absence of the mother, infants become passive and apathetic and begin to suffer damage to personality development The film suggests that it is the emotional climate of the mother which allows the child's mind to develop normally

Somatic Consequences of Emotional Starvation
4 **in Infants.** 1948 Silent, 30 min *

Five pairs of children, each pair age-matched within one week, are compared Each pair consists of (a) a desired, loved child in a comfortable middle-class environment, and (b) an institutionalized child separated from his mother after the age of 4 months The ravages wrought in the institutionalized children by the emotional deprivation are vividly illustrated in the retardation of their physical and mental development and their lowered resistance to disease

The Effect of Infantile Feeding-Frustration on
4 **Adult Hoarding in White Rats** 1942, J McV Hunt, Harold Schlosberg, R L Solomon, and Elliot Stellar Silent, 15 min Available sale or rental· PCR

Use of the experimental method in an attempt to control experimental factors of early childhood and show their effect on adult behavior. For a description of the experimental situation and results see page 122.

Introduction to Combat Fatigue (Mn—3428a)
5 1944, U S Navy Sound, 31 min Available sale CF Available on temporary loan basis ND

Shows development of combat fatigue symptoms starting with fear reactions Realistic flashbacks of simulated combat activities relate various combat fatigue symptoms (startle reaction, irritability, nightmares, tension, etc) to their original precipitating causes

Combat Fatigue—Insomnia (MN—3428e) 1945,
5·6 U S Navy Sound, 20 min Available sale CF Available on temporary loan basis ND

This film explains the causes of insomnia and demonstrates a method of relaxing all parts of the body

Combat Fatigue — Irritability (MN — 3428c)
5·13 1945, U S Navy Sound, 35 min Available on temporary loan basis ND

This film was especially designed to give the neuropsychiatric patient an understanding of his adjustment problem in terms of the need to

* Not available to lay groups (outside colleges or professional meetings)

face his memories and overcome the fear and frustration that once controlled him Demonstration of patient-doctor interview and group therapy

Assignment Home (MN—3428d) 1945, U S.
5·13 Navy Sound, 25 min Available sale CF Available on temporary loan basis ND

A dramatization of the return to civilian life of three neuropsychiatric patients, showing the types of adjustment problems they faced and the adjustments they made

Psychosomatic Disorders (MN—3428f) Sound,
6 22 min Available on temporary loan basis ND

Discussion and demonstration of hysterical pains and other disorders, showing how they can be real and disabling even though not discernible by X-ray examination or other means Shows the effects of prolonged fear and worry on the body

Cryptic Automatic Writing by a Multiple Per-
6 **sonality.** 1941, P L Harriman Silent, 13 min Available sale or rental PCR

A subject goes into a deep hypnotic trance during which he does some cryptic automatic writing. Upon being awakened, he is unable to decipher the writing The assumption is that he was a "second personality" during the interval while he wrote, and that he becomes a "third personality" in the period of post-hypnotic somnambulism Finally, by means of a conditioned-response technique, his normal personality is restored, and he then deciphers the writing The film presents photographs of the cryptic writing, the use of the conditioned-response technique to produce a "personality alteration" and to restore the synthesis, and a few of the manifestations subsumed by the topic *multiple personality*

Unconscious Motivation 1949, L Beck Sound,
6·13 26 min Available sale or rental AsF

Two subjects, under hypnosis, are told that as children they found some money in a park and deceived their mothers about it Awake, their unconscious guilt leads to various neurotic symptoms—tension, worry, etc Through talking with each other, symbolic dreams, and their responses to inkblot, thematic apperception, and word-association tests, they gradually reconstruct the whole story and are freed from the neurotic symptoms (See page 214 for pictorial synopsis)

Overdependency. 1949, Canadian Sound, 32
6·13 min Available sale or rental NFBC, PCR, NYU, IFB Available rental BF, VE, WD

One of the series in Mental Mechanisms produced for the Mental Health Division of the Department of National Health and Welfare of Canada The case history of an attractive young married man whose emotional life is crippled by behavior patterns carried over from childhood. Frequent psychogenic illness and overdependency on his wife and mother keep him from facing the problems of adult life In sessions with a doctor, he comes to understand the childhood origins of his emotional patterns and gradually overcomes them (See pages 174-175 for pictorial synopsis)

Symptoms in Schizophrenia. 1938, J D. Page
7 Silent, 18 min Available sale or rental PCR

This film gives a summary of symptoms in schizophrenia which may be presented by silent motion picture photography social apathy, delusions, hallucinations, silly hebephrenic reactions, cerea flexibilitas, rigidity, motor stereotypies, posturing, echopraxia, and body type. The cases are a fairly typical sample of those found in the average mental hospital

Catatonic Behavior in a Deteriorated Parergasic
7 **(Schizophrenic) Patient.*** 1938, A H Leighton Silent, 8 min Available sale or rental PCR

The patient in this picture is a farm laborer, aged 45, who was admitted when 24 because he was restless and laughing to himself At first he was cooperative and worked about the hospital,

* Exhibition to lay groups or elementary college-psychology classes not permitted Restricted exhibition agreement required by PCR

but in the course of time he became seclusive, careless of his appearance, and incontinent, and refused to do any work He spoke in a vague way of having had his brains, lungs, and intestines removed. About three years before this film was made, he became mute. For a year and a half, he has lain in bed with his head held unsupported above the pillows during all of his waking hours The film shows this posture, his hypertrophied neck muscles, and his ritualistic and stereotypic method of eating Although no analysis of the case is given, the film serves the useful purpose of showing students the overt behavior of a catatonic schizophrenic

Athetoid Gestures in a Deteriorating Paiergasic
7 **(Schizophrenic) Patient.*** 1938, A H Leighton Silent, 8 min Available sale or rental PCR.

The patient in this picture is a youth of 22, who, always very shy, became seclusive and unwilling to talk after failing a grade in school at 16 He spoke of hearing voices, losing his mind, having a spell cast upon him, and being pregnant Gradually coherent speech disappeared and mumbling, grimacing, and posturing appeared The film shows ritualistic, stereotypic gestures that fill all his waking hours. It can be seen that they have a certain pattern suggestive of symbolic meaning, and that the same patterns are repeated over and over again in various combinations While superficially the gestures suggest athetosis, the patterns make it evident that the condition is really quite different Although no analysis of the case is given, the film serves the useful purpose of showing students the overt behavior of a schizophrenic An interesting contrast to **Catatonic Behavior in a Deteriorated Paregasic Patient.**

Paranoid State and Deterioration Following
7·8 **Head Injury.*** 1939, A. H. Leighton. Sound, 11 min Available sale or rental. PCR.

The psychiatrist interviews the patient, an electric railroad motorman, age 59 Twelve years before, he was in a railroad accident, suffered a fractured skull, and was unconscious for two weeks Following this he was confused and irritable He recalled the accident but had no memory of the injury, could not recognize his incapacity for work, and believed that doctors and employers plotted against him. Rages, in which he tried to harm people, and serious neglect of his person led to his commitment to a mental hospital two years after the accident. The film interview indicates his rambling, circumstantial flow of talk which conveys disjointed and inconsistent but dominant notions of persecution.

Delusions and Hallucinations in a Senile Setting.*
7·8 1939, A H Leighton Sound, 5 min Available sale or rental PCR

The patient shown is a 79-year-old man who a few months before the film was made began to hear and respond to imaginary voices He thought he had invented a new method of communicating through space, and that it was being promoted by a large company Physical examination revealed advanced arteriosclerosis and auricular fibrillation. The film shows him in the act of demonstrating his powers of communication, both sending and receiving

A Case of Aphasia. 1939, A H Leighton. Sound,
8·9 15 min Available sale or rental PCR

This psychiatric examination of a case of speech interference is an unusually clear demonstration The patient is a 53-year-old male nurse, who, seven months before the film was made, had suffered a slight hemiplegia and aphasia The paralysis had largely cleared but the aphasia persisted The film demonstrates the general narrowing of mental activity, specific difficulties in finding words, and moderate disturbances in comprehension. This is frequently called *amnestic* or *nominal* aphasia, as the most apparent defect lies in the evocation of nouns

Experimental Masochism. 1946, J H Masser-
9 man. Silent, 10 min Available sale or rental PCR

Cats are trained to depress a pedestal switch

* Exhibition to lay groups or elementary college-psychology classes not permitted Restricted exhibition agreement required by PCR.

which delivers an air-blast (or electric shock) followed by automatic delivery of food. With some degrees of "shock," the cats continue to operate the switch, accepting the air-blast or electric shock even while food is withheld. This "self-punitive" adjustment is interpreted as involving "masochistic" factors However, if the traumata are excessive, or if the food reward is indefinitely withheld, either the "self-punitive" behavior is extinguished or the cats develop neuroses. The film presentation of experiments is very provocative of discussion and presents evidence relevant to several basic theories of deviate behavioral adjustments (Repeated showings are recommended.)

Alcohol and the Human Body. 1949, EB Sound,
10 11 min Available sale· EB Available rental IFB, PCR

Shows effects of ethyl alcohol on body and brain, and points out need for special treatment of the problem drinker

Neurosis and Alcohol: an Experimental Study.
10 1943, J H Masserman, with assistance of K S Yum Silent, 27 min Available sale or rental PCR.

An experimental demonstration of the relation between emotional frustration and the use of alcohol Cats taught to fear their food boxes became timid and agitated After they were given a mixture of milk and alcohol, there was a decrease in their fear behavior, but there was a disorganization in well-learned skills also. After a time about half the fear-conditioned cats came to choose the milk "punch" in preference to pure milk, but when these animals lost their fear reactions through retraining, they switched their preference back to the pure milk.

The Effects of Morphine on Learned Adaptive
10 **Behavior and Experimental Neuroses in Cats.** 1942, J H. Masserman and A. Wikler Silent, 17 min. Available sale or rental. PCR

Cats trained in complex food-getting behavior were given morphine, at which the more complex and more recently acquired food-getting habits disappeared, and then the simpler habits In cats made neurotic by a motivational conflict (as described in other films in this series), the injection of morphine brought about a temporary abolition of the neurotic behavior and a temporary reappearance of previously learned adaptive patterns The neurotic behavior tended to return when the effects of the morphine wore off

The Feeble-minded.* 1942, N O Pearce Sound,
11 41 min Available sale or rental. PCR

The magnitude of the problem of the feeble-minded is suggested Three main classes of causes of feeble-mindedness are listed defective embryonic developments, brain injuries, and interrupted developments Classifications of feeble-mindedness are given in terms of psychological test results and basic pathology. A child with a C A of 8 and M.A. of 12 is compared with three 20-year-olds· a moron, an imbecile, and an idiot The Manikin Test and the Seguin Form Board are used Pathological classifications are given and illustrated Brain models and encephalographs are employed in explanations of the basic brain pathologies Examples are shown of hydrocephalus, microcephaly, cretinism, mongolism, epilepsy, and cerebral palsy Occupational training is shown, and the social problem of dealing with the feeble-minded is discussed

Prefrontal Lobotomy in Chronic Schizophrenia *
13 1943-44, A H Leighton Silent, 21 min Available sale or rental PCR

The cases in this film illustrate the improvement that may be obtained in chronic schizophrenic patients through severing the thalamic frontal pathways Behavior before and after lobotomy is shown (No operation scenes)

The Dynamics of an Experimental Neurosis: Its
13 **Development and Techniques for Its Alleviation** A series of four films, made from experiments conducted in 1941-44 by Jules H Masserman, M D , at the Neurophysiological Lab-

* Exhibition to lay groups or elementary college-psychology classes not permitted Restricted exhibition agreement required by PCR

oratory of the Division of Psychiatry and the Otho S A Sprague Institute, University of Chicago (See page 615 for synopses of Parts I and II) Available sale or rental PCR.

Part III Experimental Diminution of Neurotic Behavior in Cats In the third part of the film, four "therapeutic" techniques are demonstrated (1) diminution of one of the conflictful drives, (2) retraining and reassurance, (3) environmental press, (4) social example (See page 542 for pictorial synopsis of Parts III and IV and description of results)

Part IV. Active Participation in Establishing More Satisfactory Adjustment. In the last part of the film, a fifth "therapeutic" technique is presented "working through" the conflict, or actively participating in establishing a more satisfactory adjustment Animals trained to manipulate the switches which would release their food generally developed milder neuroses and recovered from them faster, when subjected to the experimental frustration, than did animals previously dependent on the will of the experimenter for obtaining food

Social Adjustment of the Blinded Soldier* (PMF 5035) 1946, U S Army Sound, 29 min Available on loan USA
13
The problems in adjustment faced by individuals with varying degrees of visual impairment

To Hear Again* (PMF 5052) 1947, U S Army Sound, 36 min Available on loan USA.
13
Rehabilitation and readjustment problems of individuals who have suffered loss of hearing.

Toward Independence* (PMF 5055) 1948, U S Army Sound, 30 min Available on loan USA
13
Rehabilitation and readjustment of paraplegics, showing problems of employment of disabled workers

Ward Care of Psychotic Patients† (TF 8-2090) 1945, U S Army Sound, 41 min. Available on loan USA.
13, 15
Shows the methods and duties of hospital attendants who care for patients in closed wards

Let There Be Light† (PMF 5019) 1946, U S. Army Sound, 58 min Available on loan· USA
13, 15
Diagnosis and treatment of psychoneurotic soldiers in an Army hospital Shows use of hypnosis, sodium pentothal, group psychotherapy, recreational therapy, and other treatment.

Shades of Gray† (PMF 5047) 1948, U S Army Sound, 67 min Available on loan USA
13, 15
A re-enactment of *Let There Be Light* with professional actors

Marriage Today (YA-156) 1950, McGraw-Hill Sound, 22 min Available sale and rental AsF
14
Demonstrates how marriages can be made to work despite differences if companionship is the basis and each partner accepts and makes allowances for the other's shortcomings.

Who's Boss? (YA-159) 1950, McGraw-Hill Sound, 16 min Available sale and rental AsF
14
Ginny and Mike can't seem to make a go of marriage, though both are successful in their separate business careers They have one conflict after another over friends, money, and their whole way of life until they learn to talk things over and compromise.

Ordering films

All films listed for use with *Abnormal Psychology and Modern Life* are 16 mm Explanations of abbreviations and the addresses of the film distributors renting or selling the films listed are as follows However, it is suggested that instructors also check local film libraries for speedy service. Order films well in advance of intended screening date two to three months if possible, for surest results

* May be shown to undergraduate students

† May be shown only to graduate students in psychology, medical students, and members of the medical profession

AF Athena Films
165 W 46th Street
New York, New York

AsF Association Films
35 W. 45th Street
New York 19, New York

BF Brandon Films
1600 Broadway
New York, New York

BIS British Information Service
30 Rockefeller Plaza
New York 20, New York

CF Castle Films
1445 Park Avenue
New York, New York

EB Encyclopaedia Britannica Films
1150 Wilmette Avenue
Wilmette, Illinois

IFB International Film Bureau
6 North Michigan Avenue
Chicago 2, Illinois

NAMH National Association for Mental Health
1790 Broadway, Room 416
New York 19, New York

ND Navy Department*
Bureau of Medicine and Surgery
Audio-Visual Training Section
Potomac Annex, Bldg 2, Room 304
Washington 25, D C

NYU New York University Film Library
26 Washington Place
New York 2, New York

OS Mental Hygiene Information Service
Room 1207, State Office Building
Columbus 15, Ohio

PCR Psychological Cinema Register
Pennsylvania State College
State College, Pennsylvania

USA United States Army
Attention Surgeon†

VE Visual Education, Inc
12th and Lamar
Austin 21, Texas

WD Wm. Dennis Film Libraries
2506 W 7th Street
Los Angeles, California

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* Navy films may be borrowed by civilian medical and allied professions and related teaching institutions Requests to borrow the Navy films listed should include the following information

1 Expected screening date (requests should be made at least two weeks prior to this date)
2 Name of teacher requesting the film, together with his title and the name and address of his institution
3 Name and catalogue number of film or films desired (*No more than four films may be requested at one time*)
4 Estimated or known number of persons for whom film will be screened, and identification of group (e g , Abnormal Psychology Class)
5 Date film will be returned The loan period is approximately one week Requests for extension of the loan period will depend on the number of prints available and the demand for them

† Army films must not be shown for a fee To obtain them, instructors should write well in advance (minimum three weeks), stating the purpose for which films are desired and describing the group or groups who are to see them (number of students, whether undergraduate, etc) Loans cannot exceed fourteen days

If you live in Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island, New York, or New Jersey, send requests to Commanding General, First Army, Governors Island, N Y , Attention Surgeon

If you live in Ohio, Pennsylvania, Virginia, West Virginia, Maryland, Kentucky or Delaware, send requests to Commanding General, Second Army, Fort Meade, Md , Attention Surgeon

If you live in Tennessee, North Carolina, South Carolina, Georgia, Florida, Alabama, or Mississippi, send requests to Commanding General, Third Army, Atlanta, Georgia, Attention Surgeon

If you live in Texas, New Mexico, Oklahoma, Arkansas, or Louisiana, send requests to Commanding General, Fourth Army, Fort Sam Houston, Texas, Attention Surgeon

If you live in Illinois, North Dakota, South Dakota, Minnesota, Iowa, Wisconsin, Michigan, Wyoming, Nebraska, Colorado, Kansas, Indiana, or Missouri, send requests to Commanding General, Fifth Army, 1660 E Hyde Park Blvd , Chicago, Ill , Attention Surgeon

If you live in California, Washington, Montana, Idaho, Oregon, Nevada, Utah, or Arizona, send requests to Commanding General, Sixth Army, Presidio of San Francisco, California, Attention Surgeon

GLOSSARY

Aberration. Marked deviation from the usual

Abreaction. Expression or release of pent-up emotions

Abulia Impairment of ability to initiate voluntary action and make decisions.

Acromegaly. A progressive disease associated with hyperfunction of the pituitary It is characterized by permanent enlargement of the skeleton, hands, feet, and face

Acrophobia. Morbid dread of high places

Acting-out Manifesting conflicts in overt behavior rather than controlling them via suppression or other defenses A common characteristic of "antisocial personalities"

Acute situational maladjustment. Superficial maladjustment to newly experienced life situations which are especially difficult or trying

Addison's disease. A disease of the adrenal glands characterized by an anemic, emaciated condition and a brownish coloration of the skin

Adequacy. Feeling of ability to cope with one's problems

Adiposo-genital syndrome. (Frohlich's syndrome). Disease of anterior lobe of pituitary occurring during adolescence, resulting in obesity and arrested development of sex glands

Adjustment. The effectiveness of the individual's efforts to meet his needs and adapt to his environment

Affect. Any experience of emotion or feeling

Ageusia. Lack or impairment of sense of taste

Aggression. Tendency to attack rather than withdraw or compromise in face of stress situation May or may not involve hostility

Aggressive reaction. Immaturity reaction involving emotionally immature individuals who persistently react to frustration with irritability, temper tantrums, and destructive behavior of an infantile sort

Agitation. Marked restlessness and psychomotor excitement

Agnosia. Loss or impairment of ability to recognize familiar objects

Agoraphobia. Morbid fear of large, open places

Agraphia. Loss or impairment of ability to express ideas in writing

Akinesia. Loss or impairment of motor functions

Alcoholics Anonymous. Organization composed of ex-alcoholics for treatment of alcoholics via personal, religious, and social rehabilitation

Alcoholism. Abnormal behavior associated with the chronic, excessive use of alcohol

Alexia. Loss or impairment of understanding of written speech, word blindness

Algophobia. Morbid dread of pain.

Alienist. Legal term for psychiatrist

Alzheimer's disease. A pre-senile dementia

Ambivalence. Simultaneous existence of contradictory emotional attitudes toward the same person, e g , love and hate

Ambivert. Personality type intermediate between introvert and extrovert.

Amblyopia. Visual weakness or dimness without associated organic pathology of the eye structure.

Amentia. Inferior mental capacity originating before or shortly after birth

Amimia. Loss or impairment of expression via gestures

Amnesia Total or partial loss of memory

Anal eroticism. Fixation of libido at anal phase of development with persistence of attempts to maintain pleasurable sensations arising in anal region and with "anal character traits" of obsessive orderliness, cleanliness, miserliness, stubbornness, and so on. (Psychoanalytic term)

Analgesia. Loss or impairment of pain sensibility

Analytic Psychology. The school or system of psychology developed by C. Jung.

Anamnesis. The personal and family history of the patient, especially as recounted by him.

Anarthria. Loss or impairment of ability to articulate words, due to brain lesion

Anesthesia. Loss or impairment of sensitivity (usually to touch but often applied to sensitivity to pain and other senses as well)

Anomia. Inability to associate objects or persons with their names

Anorexia. Loss or severe diminishment of appetite

Anosmia. Loss or severe impairment of sense of smell

Anterograde amnesia. Loss of memory for events following trauma or shock

Antisocial personality. This sub-group of the Army classification includes individuals who manifest chronic antisocial behavior, including such types as racketeers, gangsters, drug peddlers, prostitutes

Anxiety. A state of emotional tension characterized by apprehension and fearfulness

Anxiety reaction (anxiety neurosis, anxiety hysteria). A psychoneurotic disorder characterized by persistent morbid anxiety, often punctuated by acute anxiety attacks.

Apathy Marked diminution or absence of feeling and emotion in situations that usually elicit such reactions

Aphasia. Loss or impairment of ability to communicate and understand language symbols —may involve loss of power of expression by speech, writing, or signs, or loss of ability to comprehend written or spoken language—resulting from brain injury or disease

Aphonia. Loss or marked impairment of voice without associated or organic pathology

Apoplexy (stroke) Sudden diminution or loss of consciousness with possible paralysis due to brain hemorrhage.

Apraxia. Loss or marked impairment of ability to perform purposeful movements

Argyll-Robertson pupil, or sign. Failure of the pupillary reflex to light, a major diagnostic sign in general paresis

Arteriosclerosis. Degenerative thickening and hardening of the walls of the arteries, occurring usually in old age.

Astasia-abasia. Inability to stand or walk without the legs wobbling about and collapsing, although the patient has normal control of legs while sitting or lying down, no associated organic pathology

Astereognosis. Loss or marked impairment of ability to identify objects by the sense of touch.

Asthenic reaction (neurasthenia). A psychoneurotic reaction characterized by feelings of listlessness, lack of enthusiasm, and physical and mental fatigue

Asthenic type. One of Kretschmer's physical or constitutional types, characterized by leanness, underdeveloped musculature, and flat chest, and presumably prone to schizophrenia in the event of mental illness

Astraphobia. Morbid fear of lightning, thunder, and storms.

Ataxia. Muscular incoordination, particularly in the movements of the arms and legs See **Locomotor ataxia.**

Athetosis. Recurring, involuntary, tentacle-like movements of the hands and feet, usually associated with brain pathology

Atonicity. Lack of normal muscle tone.

Atrophy. A wasting away or shrinking of a bodily organ

Attitude. Mental predisposition or "set" associated with referential patterns, established by training or experience

Aura. Subjective sensations such as a peculiar odor preceding an epileptic seizure

Autistic thinking Imaginary gratification of desires in fantasy as contrasted with realistic attempts to gratify them

Autochthonous idea. Idea which appears independent of the individual's train of thought and which he usually regards as foreign and thrust upon him

Autoeroticism (masturbation). Self-gratification of sexual desires without another person.

Autointoxication. Poisoning by some uneliminated toxin generated within the body

Automatic writing. Writing without full conscious awareness or control

Automatism. Performance of repetitious acts of a nonhabitual and nonreflex nature without conscious intent or supervision

Autonomic nervous system The section of the nervous system that regulates the internal organs, consists primarily of ganglia connected with the brain stem and spinal cord and may be subdivided into the sympathetic and parasympathetic systems

Babinski reflex. Extension of great toe and spreading of small toes (instead of normal flexion) when sole of foot is stroked

Behavior. The way in which an organism reacts to stimulation or stress

Behavior disorder. See **Character and behavior disorder.**

Behaviorism A systematic approach or school of psychology which regards objective, observable manifestations such as motor and glandular responses as the key to an understanding of human behavior Consciousness, feeling, and other "subjective" phenomena are rejected as unnecessary

Bedlam. Popular corruption of the name of the early London asylum of St. Mary of Bethlehem.

Benign. A mild, self-limiting, recoverable disorder; not malignant

Bestiality. Sexual relations with animals.

Blocking. Involuntary inhibition of recall, ideation, or communication (including sudden stoppage of speech)

Brachycephalic. Having a relatively short, broad head

Bulimia. Morbid, insatiable appetite for food

Canalization. Progressive shifts in the dominance of various means to the satisfaction of a need.

Cannabis indica. Indian hemp from which the narcotic agent in hashish is extracted

Cardiovascular. Pertaining to the heart and blood vessels

Castrating Any source of injury to or deprivation of the genitals, or, more broadly, a threat to the masculinity or femininity of the individual

Castration complex (castration anxiety). In psychoanalytic theory, fears centering around injury or deprivation of the genitals as punishment for forbidden sexual desires Often used more broadly to include interference with self-actualization, particularly with respect to masculine and feminine roles, e g , a woman who dominates her husband might be referred to as a "castrating' woman

Catalepsy. A condition in which the muscles are waxy and semirigid, tending to maintain the limbs in any position in which they are placed

Catastrophic reaction. Severe disintegration of personality organization under excessive stress

Catatonia. Schizophrenic reaction, catatonic type, characterized by alternation between stupor and excitement.

Catharsis. Discharge of emotional tension associated with repressed traumatic material by "talking it out " This may be achieved during interview therapy or via hypnosis or drugs such as sodium amytal

Cathexis Investment of an object, idea, or person with special significance or feeling tone

Censor In psychoanalytic theory, the functioning of the ego and superego in preventing dangerous impulses or desires from entering consciousness

Cerebral arteriosclerosis See **Arteriosclerosis.**

Character and behavior disorder. A major category of mental disorders in the Army classification, characterized by developmental defects of a pathological type rather than by personality disorganization or decompensation resulting from excessive stress.

Chorea. A pathological condition characterized by jerky, irregular, involuntary movements.

Circumstantiality. Conversation in which many irrelevant details are included

Claustrophobia. Morbid fear of small, narrow, or enclosed places.

Climacteric. The life period from 42 to 50 associated with the menopause in women and various related glandular and bodily changes in men.

Clinical picture. The total available diagnostic picture of the patient including symptoms, stresses, dynamics, and so on.

Clonus Rapid, oscillatory movements in which muscular rigidity and relaxation rapidly follow each other Occurs following tonic phase in grand-mal epilepsy.

Coitus. Sexual intercourse.

Coma. Profound stupor with unconsciousness

Combat exhaustion Transient personality decompensation resulting from the acute stress of battle experience

Compensation. The ego defense mechanism by means of which an undesirable trait is covered up by exaggerating a desirable trait May also refer to correction of organic deficit by increased functioning of another organ or of unimpaired parts of same organ

Complex. A group of emotionally toned attitudes, desires, or memories which are partially or totally repressed

Compulsion Irresistible tendency to perform some act even though the individual realizes it is irrational and may not want to do it

Concussion. Severe impact to the skull causing rupturing of small blood vessels in the brain

Condensation. A symbolic fusion of ideas or concepts into one

Confabulation. The filling in of memory gaps with false and often irrelevant details

Conflict. Stress characterized by incompatible desires, needs, or environmental demands

Congenital. Existing at birth or before birth but not hereditary

Constitution. The relatively constant biological make-up of the individual, resulting from the interaction of heredity and environment

Contracture. Rigid contraction of a group of muscles, tending to distortion or anatomical deformity The condition may be temporary or permanent.

Conversion reaction (hysteria) The ego defensive process by which emotional conflicts are "converted" into physical-illness symptoms, a psychoneurotic reaction.

Coprophilia. Morbid interest in feces.

Crazy. Mentally disordered (Term no longer used in scientific circles.)

Cretinism. Mental deficiency associated with thyroid deficiency at an early age

Cunnilingus. Use of the tongue or mouth in erotic play with female genitals

Cyanosis. Blueness of the skin resulting from inadequate oxygenation of the blood.

Cycloid. Personality type characterized by marked mood variations from elation to depression

Cyclothymic personality. Individual characterized by frequently alternating moods of elation and sadness stimulated apparently by internal rather than external events

Decompensation. Ego or personality disorganization under excessive stress.

Delinquency. Antisocial or illegal behavior by a minor

Delirium State of mental confusion characterized by clouding of consciousness, disorientation, restlessness, excitement, and often hallucinations

Delusion. A false belief maintained despite experiences and evidence to the contrary

Dementia. Severe mental disorder involving impairment of mental ability, not congenital

Denial of reality. Ego defense mechanism by means of which the individual protects himself from unpleasant aspects of reality by refusing to perceive them

Depersonalization. Loss of sense of personal identity, often with a feeling of being something or someone else

Depression. An emotional state of dejection, gloomy ruminations, feelings of worthlessness and guilt, and usually apprehension

Dereistic thinking. Thinking (including fantasy) in which individual ignores reality and logical organization Often applied to "irrational" schizophrenic fantasies

Desensitization. Therapeutic process by means of which traumatic experiences are reduced in intensity by repeated exposures of the individual to them either in reality or in fantasy

Desire. To wish or want some object or condition related to psychobiological needs

Deterioration Degeneration of mental abilities due to brain pathology (Sometimes used more broadly to include any impairment of intellectual functions whether of functional or organic origin.)

Deviant logic. Thinking sequences often found in psychotic behavior in which conclusions are drawn that are not logically compatible with the premises or evidence.

Diagnosis. Determination of the nature and extent of a morbid process or disorder

Diathesis. Predisposition (inherited or acquired) to a specific disease

Diplegia. Paralysis of corresponding parts of the body, such as of both arms or both legs

Diplopia Double vision, seeing one object as two.

Dipsomania. Chronic excessive use of alcohol

Disorientation. Mental confusion with respect to time, place, or person.

Displacement. Transfer of an emotional attitude or symbolic meaning from one object or concept to another. As an ego defense mechanism, the redirection of emotional charges from more dangerous to less dangerous objects, e g , hostility aroused by one's boss may be taken out on one's wife

Dissociation. Separation or "isolation" of mental processes in such a way that they become split off from the main personality or lose their normal thought-affect relationships

Dissociative reaction Psychoneurotic reaction characterized by amnesia, fugue, somnambulism, or multiple personality

Dizygotic. Twins from two ova, fraternal twins.

Don Juan. Legendary roué, seducer, and profligate

Drive The motive power behind behavior

Drug addiction. The continual use of and dependence upon habit-forming drugs without medical indication

Dual personality See **Multiple personality.**

Dynamic. Pattern of interactive factors resulting in a particular event or condition

Dynamism (ego defense mechanism). Device used to protect ego integrity.

Dysarthria. Impaired speech, usually due to nervous system pathology

Dysfunction. Impairment or disturbance in the functioning of an organ.

Dysgraphia. Impaired ability to write because of ataxia, tremors, or similar conditions.

Dysrhythmia Disturbance in rhythm

Echolalia. The meaningless repetition of words by the patient, usually whatever is said to him

Economy, principle of. Concept that the individual meets stress in the simplest way possible (in terms of his evaluation of the stress situation and of his own capacities)

Edema. Watery swelling of tissues.

Ego. The self, the integrating core of the personality which mediates between needs and reality.

Ego structure The self and environmental attitudes, typical defensive reactions, and other aspects of the ego or self as the integrating core of the personality.

Egocentric. Self-centered, inclined to view everything in relation to self-interest

Elation. Intense feeling of well-being Elevated or exalted mood

Electra complex. In psychoanalytic theory, an excessive emotional attachment (love) of the daughter for the father

Electroencephalography. The recording of electrical brain waves (EEG's).

Emotional immaturity. Failure to develop normal adult degrees of independence and self-reliance, with consequent use of immature adjustive patterns and inability to maintain equilibrium under stresses which most people can meet satisfactorily

Emotional instability reaction Immaturity reaction with excitability and ineffectiveness when confronted with minor stress

Emotional insulation An ego defense mechanism in which the individual reduces the tensions of need and anxiety by withdrawing into a shell of passivity

Emotional reinforcement. The reinforcement of adjustive patterns via the mobilized energy and drive of various emotional reactions.

Encephalitis. Inflammation of the brain.

Encephalography. Medical technique for examination of the brain, by removing cerebrospinal fluid and replacing it by air.

Endocrine. Gland of internal secretion, produces secretions called *hormones* which are released into the lymph or blood stream.

Endogenous. Originating from or due to internal causes, within the body.

Enuresis. Bed-wetting, the involuntary discharge of urine

Environmental evaluation. The way in which the individual views the world—its dangers, pleasures, etc

Epidemic encephalitis. A disease of the brain believed to be caused by a filterable virus

Epilepsy. A chronic disease characterized by disturbances in consciousness and/or convulsive seizures. See **Grand mal, Petit mal, Psychomotor epilepsy, Jacksonian epilepsy.**

Epileptic furor See **Psychomotor epilepsy.**

Erogenous zones Those parts of the body which when stimulated give rise to sexual feelings, e g., lips, breasts

Erotic. Pertaining to sexual stimulation and gratification

Ethical attitudes (dimensions). Attitudes which relate to the individual's ideas of "right" and "wrong," variously referred to as "conscience" or "superego"

Etiology. Causation, the systematic study of the causes of disorders.

Eugenics. Field of science concerned with conditions that affect inborn or hereditary qualities of a race or group in direction of either improvement or degeneracy

Eunuch. Castrated male.

Euphoria. Exaggerated feeling of well-being and contentment.

Exhibitionism. Public display or exposure of genitals for conscious or unconscious purpose of sexual excitement and pleasure.

Exogenous. Originating from or due to external causes, from outside the body

Exophthalmic goiter (Graves' disease). Disorder of thyroid characterized by enlargement of gland, protrusion of the eyeballs, and various mental symptoms

Exorcism. Various techniques practiced in ancient and medieval times for casting the "evil spirit" out of the mentally ill, based on concept that the mental illness was caused by "demons" or "evil spirits"

Experimental neurosis. Neurosis-like behavior in animals produced when they are forced to make discriminations or adjustments which are beyond their range of adjustive adequacy.

External frustration Environmental obstacle to goals and need satisfactions

Extrapunitive. Tendency to evaluate source of frustrations as external and to direct hostility outward

Extrovert A personality type characterized by interests directed toward the external environment of people and things rather than toward inner experiences and oneself, outgoing, sociable.

Fabrication Relating imaginary events as if they were true without intent to deceive, confabulation

Fantasy. Daydream, also an ego defense mechanism by means of which the individual escapes from the world of reality and gratifies his desires in fantasy achievements.

Feeble-mindedness. Mental deficiency, lack of capacity as distinguished from retardation.

Feeling. The pleasure and pain dimension of emotion or bodily functions

Fellatio Insertion of penis into the mouth for purposes of sexual gratification

Festinating gait. Incoordinated, hurried, uncertain walk in *paralysis agitans*

Fetishism Sexual deviation in which the individual achieves sexual gratification by means of an object (hair, handkerchief, panties) which symbolizes the person to whom it belongs

Fetus Embryo after the sixth week following conception

Fixation Unreasonable or exaggerated attachment to some person or arrestment of emotional development on a childhood or adolescent level

Flight into illness. Escape from some unpleasant situation or problem by simulating the symptoms of some organic ailment and/or becoming convinced that one is ill

Flight of ideas. Rapid succession of ideas without logical association or continuity

Focal infection. Infection located in some particular bodily organ such as the teeth or tonsils

Focal lesion. Lesion in a particular area of the brain

Folie a deux. A psychotic interpersonal relationship involving two people, e g, where husband and wife both become psychotic with similar symptomatology.

Fornication. Extramarital sexual relations

Fraternal twins Dizygotic twins, fertilized by separate germ cells, thus not having same genetic inheritance May be of same or opposite sex

Free association Uninhibited expression of ideas as they enter consciousness during therapy

Free ***floating anxiety.*** Anxiety *not referable to* any specific situation or cause

Frigidity Lack of or reduced sexual desire in a woman; inability to experience sexual pleasure or gratification

Frohlich's syndrome. See **Adiposo-genital syndrome.**

Frustration. Thwarting of a need or desire

Frustration ***tolerance.*** See **Stress tolerance.**

Fugue. One type of dissociative reaction in which the individual leaves his present life situation and establishes a somewhat different mode of life in another locale Although he is amnesic for his past life, his other abilities are unimpaired and he appears normal to those around him.

Functional Having *no demonstrable organic* basis or etiology, psychogenic

Furor. Transitory outbursts of excitement or anger in which the individual may be quite dangerous

Gene. An element of the germ plasm concerned with the *transmission of hereditary* characters

General paralysis. The older term for *paresis*

Genetics. Field of science dealing with heredity

Genitalia The organs of reproduction

Gerontology Field of science dealing with the study of all aspects of old age

Gigantism. Abnormally tall stature resulting from hyperfunctioning of the pituitary.

Glioma. Tumor

Globus hystericus. Choking sensation in the throat, once a common complaint in hysterical (conversion) reactions

Glove anesthesia. Area of anesthesia approximating the area of hand and wrist that would be covered by a glove. Formerly common in hysterical (conversion) reactions

Goal. The object or condition for which the individual strives

Gonads. Testes or ovaries

Grand mal. Major convulsive attack with loss of consciousness in epilepsy

Graphomania Voluminous writing of a meaningless *or incoherent nature*

Graves' disease See **Exophthalmic goiter.**

Group therapy. Psychotherapy with two or more patients at the same time

Guilt. Unpleasant feeling of sinfulness arising from behavior or desires contrary to one's ethical principles Involves both self-devaluation and apprehension growing out of fears *of punishment*

Gynephobia Morbid fear of women

Hallucination. A sense perception for which there is no appropriate external stimulus

Hebephrenic reaction. A type of schizophrenic reaction characterized by marked shallowness and distortion of affect, and silly, inappropriate behavior

Hemi-. Prefix meaning *half*

Hemiplegia. Paralysis of one half of the body

Hermaphrodite. Anatomical sexual abnormality in which individual has well-developed sex organs of both sexes

Heterosexuality. Social and sexual interest in the opposite sex

Hierarchy of needs. The concept that needs arrange themselves in a hierarchy in terms of importance, or "prepotence," from the most basic biological needs to those psychological needs concerned with self-actualization

Holistic. A systematic approach to science involv-

ing the study of the whole or total configuration, the view of man as a unified psychobiological organism inextricably immersed in a physical and socio-cultural environment.

Homeostasis. The tendency of organisms to maintain their physiological functioning within optimal limits for individual and race survival

Homosexuality. Sexual interest in or overt sexual activity with members of one's own sex

Hostility An emotional reaction or drive toward the destruction, impairment, damage, or hurt to an object interpreted as the source of frustration or threat

Huntington's chorea An incurable disease presumably of hereditary origin which is manifested in jerking, twitching movements and progressive mental deterioration

Hutchinson's teeth Notched or peg-shaped teeth typically found in congenital syphilis.

Hydrocephalus (hydrocephaly). Enlargement of the cranium resulting from the excessive accumulation of spinal fluid.

Hydrotherapy. Use of hot or cold baths, ice packs, etc , in treatment.

Hyper-. Prefix meaning *increased*

Hyperalgesia. Increased sensitivity to pain.

Hyperesthesia Increased touch sensitivity

Hyperkinesis Excessive or exaggerated muscular activity

Hypermnesia. Unusual retentiveness of memory or clarity of memory images

Hypesthesia. Decreased sensitivity, especially to touch

Hypnagogic. Pertaining to state between sleeping and waking

Hypnoanalysis. Analytic psychotherapy carried out under hypnosis.

Hypnosis. Trancelike mental state induced in a cooperative subject by suggestion

Hypo-. Prefix meaning *decreased*

Hypochondriasis. Neurotic reaction characterized by excessive concern about one's health in the absence of related organic pathology.

Hypokinesis Decreased motor activity

Hypomania. Mild form of manic excitement in manic-depressive reactions

Hysteria. Older term used to include conversion and dissociative neurotic reactions It involves the simulation of symptoms of organic illness in the absence of any related organic pathology

Id. In psychoanalytic terminology, the reservoir of instinctual drives, the deepest, most inaccessible, and most primitive stratum of the mind

Identification. An ego defense mechanism in which the individual identifies himself with some other person or institution usually of a successful or illustrious nature

Idiopathic Unknown causation, inherent in the constitutional make-up of the individual

Idiot Lowest level of mental defective, idiocy has an I Q range up to 24

Illusion Misinterpretation of sense data

Imbecile Mental defective with I Q between 25 and 49

Immaturity reaction. This sub-category of the Army classification includes individuals who are emotionally immature and therefore unable to maintain their equilibrium and independence under stress

Immaturity with symptomatic "habit" formation. Sub-category of the Army classification, used to refer to occasional instances in which a specific symptom is the single outstanding expression of emotional immaturity, e g, speech disorder.

Impotence. Inability of male to achieve orgasm

Impulse Drive or tendency to action

Impunitive. Tendency toward conciliatory attitude rather than blaming either self or others.

Inaccessible. Patient so disturbed or withdrawn that it is impossible to elicit his attention and cooperation or to converse with him.

Inadequate personality Individuals who are neither physically nor mentally grossly deficient, but who manifest inadequate responses to intellectual, emotional, social, and physical demands, e g, ineptness, poor judgment, lack of adaptability.

Incest. Sexual relations between close relatives such as father and daughter or brother and sister

Incompetent. Legal designation of individual as incapable of managing his affairs with ordinary prudence because of mental illness or deficiency

Infantilism. Persistence of infantile emotional attitudes and patterns into adult life

Inferiority complex. Strong feelings of inadequacy and insecurity which color individual's entire adjustive efforts

Inhibition. Conscious restraint of impulse or desire

Insanity Legal term for mental disorder, implying lack of responsibility for one's acts and inability to manage one's affairs

Insight. Clinically, the individual's understanding of his illness or of the motivations underlying his behavior, in general psychology, the sudden grasp or understanding of meaningful relationships in a situation

Insulin therapy (insulin coma therapy—ICT). Treatment of psychiatric disorders by production of hypoglycemic states by injection of insulin

Integration Organization of parts (psychological, biological functions) to make a functional whole

Intellectualization. An ego defense mechanism by which the individual achieves some measure of insulation from emotional hurt by cutting off or distorting the emotional charge which normally accompanies hurtful situations

Internal frustration. Psychological barrier to goals and need satisfactions

Introjection Incorporation of object or person into one's own ego structure with tendency to identify with them and to be affected by what happens to them

Intropunitive Tendency to direct hostility aroused by stress situation toward self, blaming self for difficulties

Introvert. Personality type characterized by direction of interest toward oneself and one's inner world of experiences

Invert Homosexual

Involutional melancholia. A psychotic-depressive reaction characterized by depression, agitation, and apprehension

Isoimmunization. Incompatibility of blood type between mother and fetus

Isolation. An ego defense mechanism by means of which contradictory attitudes as well as the feelings which normally accompany particular attitudes are kept apart, thus preventing conflict or hurt

Jacksonian epilepsy. Muscle spasms usually restricted to a small group of muscles or to one half of the body although occasionally the entire body may become involved Consciousness is usually retained

Juvenile paresis. General paresis in children, usually of congenital origin

Kleptomania. An irresistible compulsion to steal, usually without any use for the article stolen

Korsakoff's psychosis. Psychosis usually associated with chronic alcoholism and characterized by disorientation, gross memory defects, confabulation, and polyneuritis

Lability Instability, particularly with regard to affect

Latent. Inactive or dormant

Lesbianism. Homosexuality in women

Lesion, neural Brain injury in specific area

Lethargic. Drowsy, lacking in vigor

Leucotomy A brain operation involving the severing of association pathways in the frontal lobes of the brain, in which the instruments are inserted transorbitally rather than by drilling holes in the top or sides of the skull.

Levels of defense Biological, psychological, or sociological adjustive reactions

Libido In general psychoanalytic terminology, the instinctual drives of the id In a narrow sense the drive for sexual gratification.

Lobectomy. Excision or removal of parts of the prefrontal lobes, used in treatment of certain severe cases of mental illness

Lobotomy. A brain operation involving the severing of pathways in the frontal lobes of the brain Used in treatment of certain severe cases of mental illness

Locomotor ataxia Muscular incoordination usually resulting from syphilitic damage to the spinal-cord pathways

Lues. Syphilis

Lunacy. A legal term roughly synonymous with insanity The term originates from the Latin word *luna* (moon) The moon was presumably the cause of certain types of mental illness

Lycanthropy. The delusion of being a wolf.

Macrocephalus. Having an abnormally large cranium

Macropsia. An abnormal condition in which objects are perceived as larger than they really are; usually associated with conversion reactions

Madness. Old term used to refer to severe mental illness

Maladjustment. Lack of harmony with self or environment Inadequate or poor adjustment.

Malinger. To fake illness or disability symptoms consciously

-mania. Suffix denoting a compulsive or morbid preoccupation with some impulse or activity, e.g, compulsive stealing is called *kleptomania*

Manic-depressive reaction. A group of psychotic reactions characterized by prolonged periods of excitement and overactivity (manic), or by periods of depression and underactivity (depressive), or by alternation or mixture of the two

Mannerism. A recurring, stereotyped gesture, posture, or movement.

Marijuana A narcotic drug derived from the plant cannabis indica Used in the form of cigarettes called "reefers"

Masochism Sexual deviation in which individual obtains sexual gratification from having pain inflicted upon him

Masturbation. Self-stimulation of genitals for sexual gratification

Mechanism Device (e g , rationalization) by which individual unconsciously attempts to protect his ego integrity

Megalomania. Delusions of grandeur

Melancholia. Mental disorder characterized by extreme depression

Meninges. The membranes which envelop the brain and spinal cord

Meningitis Inflammation of the meninges

Mental deficiency, primary. Mental retardation present since birth without known organic brain pathology, usually considered of hereditary origin

Mental deficiency, secondary. Mental retardation resulting from organic damage to the brain, whether congenital or acquired.

Mental disease Mental disorder associated with an organic disease of the nervous system, e g, syphilis of the nervous system

Mental hygiene. Scientific field primarily concerned with healthy personality development and the prevention of psychiatric disorders

Mesmerism Relating to the theories of "animal magnetism" (hypnosis) formulated by Anton Mesmer.

Metabolic psychoses. Psychotic reactions associated with metabolic disturbances

Metrazol therapy Administration of metrazol to produce epileptiform convulsions, formerly used in the treatment of certain psychotic reactions

Microcephaly. Abnormal smallness of head

Micropsia Perception of objects as smaller than they actually are.

Migraine. A psychosomatic disorder characterized by recurrent severe headaches, often with visual disturbances and nausea

Modus operandi. Manner or mode of adjusting, a criminal's typical pattern of performing his crimes

Mongolism. A type of mental deficiency in which almond-shaped eyes are distinctive

Monomania. Compulsive preoccupation with one idea or activity

Monoplegia. Paralysis of one arm or leg

Monozygotic twins. Identical twins, fertilized from the same egg

Morbid. Unhealthy, pathological

Moron. Highest grade of mental deficiency with I Q range from 50 to 70.

Multiple personality. A type of dissociative reaction characterized by the development of two or more relatively independent personality systems in the same individual

Mutism. Refusal or inability to speak

Mysophobia. Morbid fear of germs or contamination

Myxedema. A disorder due to thyroid deficiency in adult life, characterized by mental dullness

Narcissism. Self-love

Narcotherapy (narcoanalysis, narcosynthesis). Carrying on psychotherapy with patient while he is under influence of a narcotic drug, e g , sodium amytal or pentothal.

Narcolepsy. An abnormal reaction characterized by transient, compulsive states of sleepiness

Necrophilia. Sexual deviation in which individual obtains sexual gratification by sexual relations with a dead body.

Need. A biological or psychological condition whose gratification is necessary for the maintenance of homeostasis or for self-actualization

Need-satisfaction sequences. Relates to the pleasurable or unpleasurable aspects and aftereffects of the conditions surrounding the gratification of needs

Negativism. A form of aggressive withdrawal involving the refusal to cooperate or obey commands, or doing the exact opposite of what has been requested

Neologism. A new word coined by the patient

Neoplasm. Tumor

Nervous breakdown. Popular term denoting neurotic or psychotic levels of personality decompensation, particularly those characterized by anxiety, irritability, restlessness, depression, and inability to concentrate

Nervousness. A state of emotional tension, restlessness, and hypersensitivity

Neurasthenia. Older term for asthenic reaction, a neurotic reaction characterized by chronic mental and physical fatigue and listlessness

Neuropsychiatry. Broadly speaking, the scientific field concerned with the diagnosis, treatment, and prevention of psychiatric disorders

Neurosis (psychoneurosis). Mild functional personality disorder in which there is no gross personality disorganization and in which the patient does not ordinarily require hospitalization Synonymous with psychoneurotic disorder, neurotic disorder

Neurosyphilis. Syphilis affecting the central nervous system

Neurotic-depressive reaction A psychoneurotic reaction characterized by marked, persistent dejection and discouragement

Nihilistic delusion. Fixed belief that everything is unreal, that nothing really exists

Nosology. The naming and classification of diseases

Nyctophobia Morbid fear of darkness

Nymphomania. Excessive sexual desire in the female

Obsession A persistent idea or thought which the individual recognizes as irrational but cannot seem to get rid of

Obsessive-compulsive reaction A psychoneurotic reaction characterized by persistent irrational thoughts and impulses

Occupational therapy. The use of occupational training or activity in psychotherapy

Ochlophobia Morbid fear of crowds

Oedipus complex. In psychoanalytic theory, excessive emotional attachment, involving conscious or unconscious incestuous desires of the son for his mother

Oral eroticism Pleasurable sensations centering in lips and mouth, related to early pleasure arising out of nursing

Organic psychosis. A psychosis associated with organic brain pathology

Organic viewpoint. The view that all mental disorders have an organic basis.

Orientation. Individual's ability to comprehend the environment relative to time, place, and person

Orthopsychiatry. Field of psychiatry primarily concerned with unhealthy personality trends and the maladjustments of children

Out-patient An ambulatory patient who visits a hospital clinic for examination and treatment, as distinct from hospitalized patients.

Overcompensation. The marked exaggeration of compensatory activities in trying to cover up weakness or inferiority See **Compensation.**

Overdetermination. A single behavior pattern or adjustive reaction determined by several needs.

Panic Severe personality disorganization involving intense anxiety and usually paralyzed immobility or blind flight

Paralysis agitans (Parkinson's disease) A progressive disease characterized by a masklike expressionless face and various neurological symptoms

Paramnesia False memory in which individual thinks he remembers events that did not occur

Paranoia A type of disorder characterized by slowly developing, logical, well-systematized delusions of persecution and/or grandeur

Paranoid personality Category applied to individuals showing abortive paranoid reaction characterized by the use of a projection as a defense mechanism, suspiciousness, envy, extreme jealousy, and stubbornness

Paranoid state A type of disorder characterized by transient delusions of persecution and/or grandeur which are not well systematized

Paraplegia. Paralysis of the legs and lower part of the body

Parergasic Pertaining to psychotic disorders characterized by incongruities, oddities, mannerisms, etc.

Paresis. General paresis, an organic psychosis caused by syphilitic infection of the brain

Paresthesia. Pathological cutaneous sensations, such as feeling that bugs are crawling around under the skin

Parkinson's disease See **Paralysis agitans.**

Parorexia. Appetite or craving for peculiar or inappropriate foods

Passive-aggressive reaction. Immaturity reaction in which aggressiveness is expressed by such passive measures as pouting, stubbornness, procrastination, inefficiency, and passive destruction.

Passive-dependency reaction Immaturity reaction characterized by helplessness, indecisiveness, and a tendency to cling to others for protection and support

Pathogenesis. The origin and course of development of a disease

Pathogenic. Causing disease or pathology

Pathological personality types. Individuals who are neither neurotic nor psychotic but manage to maintain a borderline adjustment which might be likened to an abortive stage in the development of a more severe mental disorder

Pathology The field of science dealing with the abnormal changes in structure and function which occur in physical and mental disorders

Pavor nocturnus. Nightmare, night terror

Pederasty. Sexual intercourse via the anus

Pedophilia. A sexual deviation in which an adult engages in or desires sexual relations with a child

Pellagra. A vitamin deficiency disease

Penis-envy. The desire of the female for male sex organs and status

Pentothal interview. See **Narcotherapy.**

Perseveration. The persistent continuation of a line of thought or activity once it is under way Clinically, inappropriate repetition

Perversion. Deviation from normal

Pervert. A sexual deviate.

Petit mal. A relatively mild form of epilepsy involving a temporary partial lapse of consciousness.

Phallic symbol. Any object which resembles the erect male sex organ.

Phantasy. See **Fantasy.**

Phobia. Irrational fear, the individual may realize its irrationality but nevertheless be unable to dispel it

Phobic reaction. A psychoneurotic reaction characterized by various irrational fears

Photophobia Morbid fear of strong light

Physique. Body form

Pick's disease A form of pre-senile dementia

Play therapy. The use of play activities in psychotherapy with children The counterpart for adults is recreational therapy.

Polyneuritis. Disease of the peripheral nerves

Possessed. An ancient term for mental illness, based on the belief that the mentally ill individual was "possessed" by an "evil spirit"

Post-hypnotic suggestion. Suggestion given during hypnosis to be carried out by the subject after he is brought out of hypnosis

Precipitating cause. The particular stress which precipitates the disorder

Predisposing cause The factors which lower the individual's stress tolerance and pave the way for the appearance of the disorder

Predisposition. A tendency toward the development of a particular disorder if placed under excessive stress

Prefrontal lobectomy. See **Lobectomy.**

Prefrontal lobotomy. See **Lobotomy.**

Prenatal. Before birth

Primary cause. The cause without which the disorder would not occur

Prodromal. Symptoms preceding and heralding a disease.

Prognosis. Prediction as to the probable course and outcome of a disorder

Projection An ego defense mechanism in which the individual places the blame for his difficulties upon others or attributes to them his own unethical desires and impulses

Projective technique. Any psychological technique for the diagnosis of personality organization utilizing relatively unstructured stimuli which reveal the individual's basic attitudes, conflicts, and so on

Pseudocyesis False pregnancy, a hysterical (conversion) reaction.

Pseudolalia. Meaningless sounds made by some psychotics and mental defectives

Psychasthenic reaction. See **Obsessive-compulsive reaction**

Psychiatric evaluation The neurological findings, interview, and other data that constitute the psychiatric material in the diagnosis

Psychiatrist. A medical doctor who specializes in the diagnosis and treatment of mental disorders

Psychiatry. That field of medicine dealing with the diagnosis and treatment of mental disorders

Psychoanalysis. A comprehensive, systematic approach to human behavior whose broad outlines were laid down by Sigmund Freud It consists of a theory of personality development and functioning, psychotherapeutic techniques, and research techniques for the investigation of personality functions

Psychobiology. The broad, eclectic approach to human behavior fostered by Adolf Meyer emphasizing the pluralistic determinants of behavior and the necessity for maintaining a "holistic" approach

Psychodiagnostics. Personality evaluation via diagnostic psychological techniques (formerly restricted to use of Rorschach ink blots)

Psychodrama The psychotherapeutic technique worked out by Moreno in which the acting of various roles is a cardinal part of the therapy

Psychogenic. Of psychological origin· originating in the psychological functioning of the individual

Psychological evaluation. The test, interview, and other material that constitute the psychological aspect of diagnosis

Psychological need Need emerging out of environmental interactions, e g , the need for social approval

Psychology. The science of human behavior

Psychomotor A term to denote both psychological and physical activity

Psychomotor epilepsy. State of disturbed con-

sciousness in which the individual may perform various activities, sometimes of a homicidal nature, for which he is later amnesic

Psychoneurosis See **Neurosis.**

Psychopathic. Abnormal

Psychopathic personality. Older term used to refer to a variety of immaturity and pathological personality types now included under the general heading of *Character and Behavior Disorders* in the Army classification See **Antisocial personality.**

Psychopathology. The field of science dealing with the causes and nature of abnormal behavior.

Psychosis. Severe personality disorder involving loss of contact with reality and usually characterized by delusions and hallucinations Hospitalization is ordinarily required

Psychosurgery. Any of the various techniques of brain surgery for the treatment of mental disorders.

Psychotherapy. Treatment of personality maladjustment by psychological techniques

Psychotic Pertaining to a psychosis

Pubertas praecox Oversecretion of adrenal cortex in childhood with pathologically early sexual maturity

Pyromania. Compulsion to set fires

Pyrophobia. Morbid fear of fire

Rapport. An interpersonal relationship characterized by a spirit of cooperation, confidence, and harmony; usually between therapist and patient

Rationalization. An ego defense mechanism in which the individual thinks up "good" reasons to justify what he has done, is doing, or intends to do

Reaction formation An ego defense mechanism in which dangerous desires and impulses are prevented from entering consciousness or being carried out in action by the fostering of opposed types of behavior and attitudes

Reaction sensitivity Sensitization or tendency to perceive certain elements of a total situation, as a result of previous experience and acquired attitudes

Reactive depression (neurotic depressive reaction) A mild depression in the face of loss or environmental setbacks

Reality. The world as it actually is (relatively speaking) as distinct from the world of daydreams and fantasy

Reality attitudes or dimensions Attitudes which relate to the gratification of needs in the light of environmental possibilities, limitations, and retaliations

Reality testing. The individual's behavior aimed at testing or exploring the nature of his social and physical environment, often used more specifically to refer to the testing of the limits of permissiveness of his social environment

Recessive. The characters carried by nondominant genes which remain dormant in the presence of dominant genes but make their appearance when two recessive genes combine

Recidivism. The recurrence of delinquency or criminal behavior despite punishment or treatment

Redintegration Condition in which an element of an experience serves to re-establish the whole

Referral (referral agency). To send or recommend an individual for psychiatric diagnosis or treatment.

Regression. An ego defense mechanism in which the individual retreats to the use of less mature responses in attempting to cope with stress and maintain ego integrity

Remission. Marked improvement or recovery appearing in the course of a mental illness, may or may not be permanent

Repression. An ego defense mechanism by means of which dangerous desires and intolerable memories are kept out of consciousness

Resistance. The tendency to maintain symptoms and resist treatment or uncovering of repressed material

Retrograde amnesia. Loss of memory for events prior to the patient's accident or injury

Rigid control An ego defense mechanism involving reliance upon inner restraints, e g, inhibition, suppression, repression, reaction formation.

Romberg's sign. Tendency to sway when eyes are closed and the feet are placed close together, diagnostic sign in locomotor ataxia.

Sadism. Sexual deviation in which sexual gratification is obtained by the infliction of pain upon others

St. Vitus' dance. A hysterical chorea of common occurrence during the Middle Ages

Satyriasis Excessive sexual desire in the male

Schizoid personality. An abortive schizophrenic reaction characterized by unsociability, seclusiveness, serious-mindedness, and often eccentricity.

Schizophrenia A major psychotic disorder characterized by emotional blunting and distortion, disturbances in thought processes, and a withdrawal from reality Army classification includes six sub-types Latent, Simple, Hebephrenic, Catatonic, Paranoid, Unclassified

Scotophilia. Sexual deviation in which individual obtains full sexual gratification from "peeping" or observing others, particularly in the nude or in the act of intercourse

Secondary cause. Factors which contribute to the mental illness but which in and of themselves would not produce it, as distinct from *primary cause,* without which the disorder would not occur

Sector therapy A type of goal-limited psychotherapy worked out by Felix Deutsch utilizing "associative anamnesis" as a therapeutic technique for keeping the therapy within a particular sector or area of the personality

Security Relates to the maintenance of conditions necessary to need gratification

Self (ego). The integrating core of the personality which mediates between needs and reality

Self-devaluation. Lowered feelings of self-worth and self-esteem.

Self-esteem. Feeling of personal worth

Self-evaluation The way in which the individual views himself—his worth, adequacy, etc

Self-recrimination. Self-condemnation and blame.

Semantics. Pertaining to the meaning and significance of words in human behavior

Senile. Pertaining to old age

Sequela. Symptoms remaining as the aftermath of a disorder

Sexual deviate This sub-group of the Army classification includes individuals who manifest homosexuality, pedophilia, fetishism, or other sexually deviate behavior

Shock reaction. Transient personality decompensation in the face of sudden acute stress

Shock therapy The use of insulin, metrazol, or electro-shock as methods of treatment in mental disorders

Social pathology. Abnormal patterns of social organization, attitudes, or behavior, undesirable social conditions which tend to the production of individual pathology

Sodium amytal, Sodium pentothal Barbiturate drugs used in some psychotherapy to produce a state of relaxation and suggestibility

Sodomy. Intercourse via the anus

Somatic Pertaining to the body, organic as distinct from psychological

Somatization reaction. Psychoneurotic reaction in which the stress-aroused anxiety is channeled through the visceral organs, resulting in various somatic symptoms

Somatotype The physique or build of a person, as assessed by various "type" theories based on physical characteristics

Somnambulism. Sleepwalking

Spasm. An intense, involuntary, usually painful contraction of a muscle or group of muscles

Spasticity. Marked hypertonicity or continual overcontraction of muscles, causing stiffness, awkwardness, and motor incoordination

Staff approach (team approach) Modern approach to the diagnosis, understanding, treatment, and prevention of abnormal behavior, involving the teamwork of psychiatrists, clinical psychologists, psychiatric social workers, and other specialized personnel.

Startle reaction. Sudden involuntary motor reaction to unexpected stimuli, especially to mild stimuli as a result of a state of hypersensitivity

Stereotypy. Persistent and inappropriate repetition of phrases, gestures, or acts

Stress. Any conditions impinging on the organism which require adjustive reactions

Stress tolerance (frustration tolerance). The nature, degree, and duration of stress which an individual can tolerate without undergoing serious personality decompensation

Stupor. Condition of lethargy and unresponsiveness, with partial or complete unconsciousness

Stuttering (stammering). Speech disorder characterized by blocking and repetition of initial sounds of words

Subconscious. Activities of which the individual is not aware, term no longer in common use

Sublimation Ego defense mechanism via which frustrated sexual energy is partially channeled into substitutive activities

Superego. Conscience, ethical or moral dimensions (attitudes) of personality

Suppression The conscious forcing of desires or thoughts out of consciousness, conscious inhibition of desires or impulses

Symbolism The representation of one idea or object by another

Syncope. Temporary loss of consciousness resulting from cerebral anemia

Syndrome A group or pattern of symptoms which occur together in a disorder and represent the typical picture of the disorder

Syphilophobia Morbid fear of syphilis

Tabes dorsalis See **Locomotor ataxia.**

Tarantism Type of hysterical dancing occurring in epidemic form during the Middle Ages

Tension. The condition arising out of the mobilization of psychobiological resources to meet a threat, physically, involves an increase in muscle tonus and other emergency changes, psychologically, is characterized by feelings of strain, uneasiness, and anxiety

Testosterone. Male sex hormone

Thematic Pertaining to a theme or topic of discourse

Therapeutic. Pertaining to treatment or healing

Therapy Treatment, application of various treatment techniques

Threat. Danger to need gratification

Thyrotoxic. Pertains to oversecretion of thyroxin.

Tic Intermittent twitching or jerking, usually of facial muscles.

Tonic. Pertaining to muscle tension or contraction, muscle tone

Topectomy A type of brain surgery used in the treatment of certain cases of chronic mental illness which do not respond to other types of therapy, involves removal of circumscribed area of brain tissue

Total push. A type of therapy in which all treatment procedures — medical, psychological, sociological — are coordinated into a total therapeutic attack

Toxic. Poisonous

Toxic psychosis. Psychosis due to or associated with a toxic agent

Trance. Sleeplike state in which range of consciousness is limited and voluntary activities are suspended, deep hypnotic state

Transference. Identification of some person in the individual's immediate environment with some important person in his past life (Usually the identification is made unconsciously) In therapy, the person in the individual's past life with whom he identifies the therapist, e g , his father

Transient personality reactions. Major heading of mental disorders in the Army classification, involves transient personality decompensation in the face of special or acute stress

Trauma. A wound or injury, may be either biological or psychological in nature

Traumatic. Pertaining to a wound or injury

Traumatic neurosis. See **Shock reactions.**

Tremor. A continuous, involuntary muscular trembling or spasm, limited to a small area

Trephine, trepan. An instrument for perforating the skull

Tube feeding. Feeding patients by inserting a

flexible tube through the nostrils into the throat and pouring liquids directly into the esophagus

Twilight state. A state of disordered consciousness in which the individual performs purposeful acts for which he is later amnesic. See **Psychomotor epilepsy.**

Unconscious. Lack of awareness, that portion of the psyche which is a storehouse of repressed or forgotten memories and desires which are not directly accessible to consciousness but may be brought into consciousness when ego restraints are removed, as in hypnosis.

Unconscious motivation. Motivations for one's behavior of which individual is unaware.

Undoing Ego defense mechanism by means of which the individual performs activities designed to make up for or atone for his misdeeds, thereby, in a sense, "undoing" them

Vasomotor. Pertaining to the walls of the blood vessels

Vegetative. Withdrawn or deteriorated to the point where the individual leads a passive, vegetablelike existence.

Verbigeration. Prolonged and monotonous repetition of meaningless words and phrases.

Vertigo. Dizziness.

Vicious circle. Chain reaction in which the individual resorts to an unhealthy defensive reaction in trying to solve his problems, which only serves to complicate his problems and make them more difficult to solve, e g, showing off to gain evidence of interest from others may only result in punishment and increased frustration, which in turn demands more drastic defensive measures

Voyeurism. A sexual deviation in which the individual obtains sexual gratification through "peeping," particularly at the nude bodies or erotic activities of others

Wassermann test. A serum test used in the diagnosis of syphilis

Wish-fulfilling. Ego tendencies toward the adoption and maintenance of beliefs and attitudes which are what the individual would like things to be rather than what they are, our tendency to see and believe what we would like to be true

Withdrawal Intellectual, emotional, or physical retreat

Withdrawal symptoms. Acute physiological discomfort experienced by drug addict when drugs are not administered

Working through. In general, the working with a problem situation until satisfactory adjustments are achieved and firmly established It is a growth experience in the direction of maturity

Worry Persistent, undue concern about past behavior or about anticipated dangers in the present or future

Zoophilia Abnormal degree of affection for animals or a particular animal.

Zoophobia. Morbid fear of animals

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